www.koltec.eu

CATALOGUE 2018

English edition

KOLTEC

ELECTRIC FENCING

www.koltec.eu

HISTORY

KOLTEC BV was established in 1942 in Breda. Since 1945 there is the production of electric fencers.
The present ST, the mushroom model, was basically the first fencer that was produced.

KOLTEC BV is still a family business that has specialized in the production and utilization of electric fences.

Transformator production

SERVICE

Our skilled employees take care for a good advice before and after the product is bought. Satisfied users are our most important business card. Feed back from users about the installation of an electric fence, inspires us to develop better and new products.

REPAIR

Koltec has skilled technical employees, who take care of the repair of broken devices, but also develop new devices. Because this is in one hand, the experience of end users is used to develop better products.

PRODUCTION

All devices and part of the accessories which are sold by Koltec are produced, assembled and packed in our factory in Breda, Holland. You are buying a real Dutch made product.

Office and production

WARRANTY

On all electronic products KOLTEC BV gives a 2 year warranty.
Starting at the date of purchase.

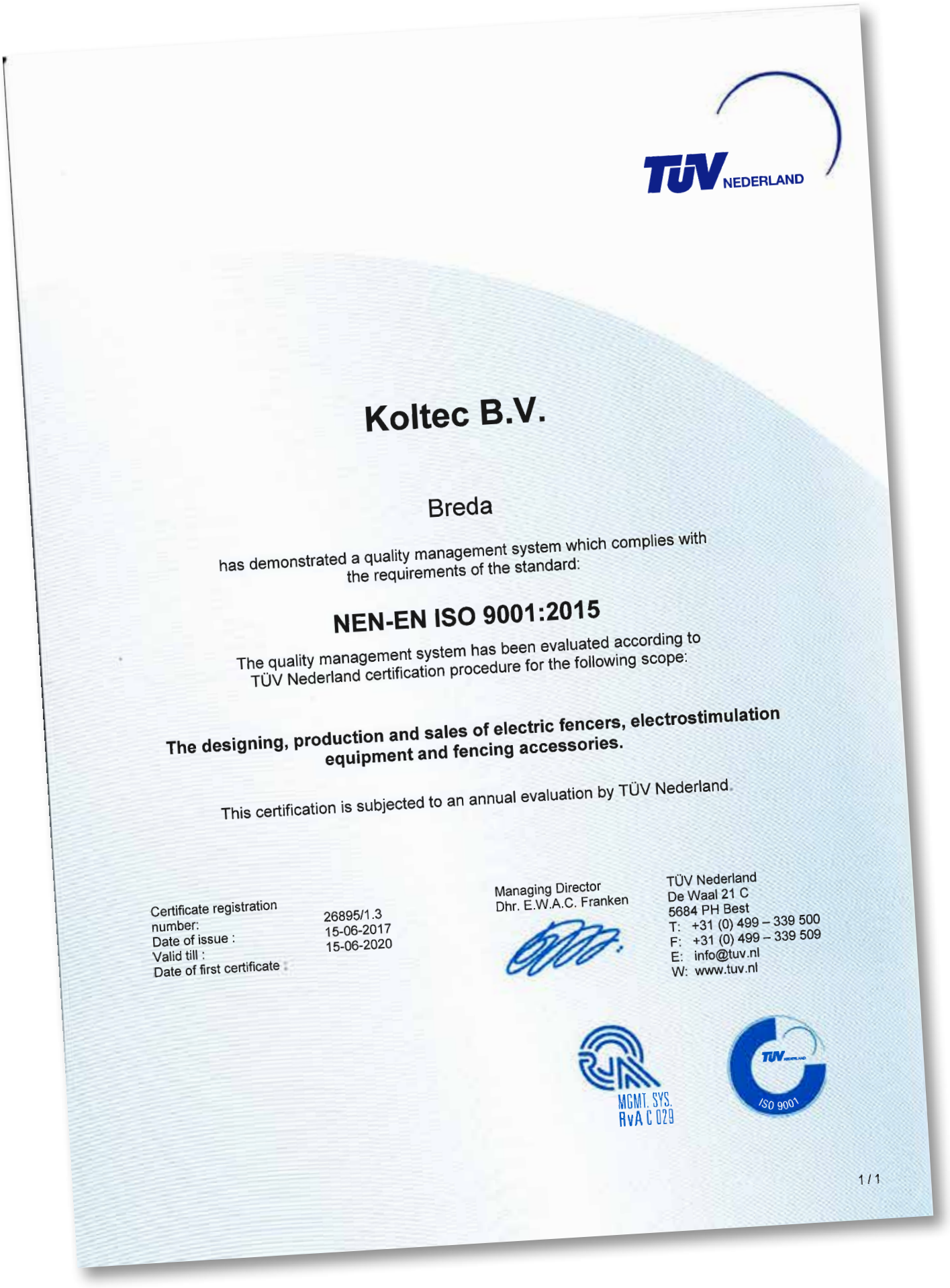
DELIVERY

Because we produce most of our product range ourselves, the delivery service is very fast and flexible. Our goal is to have seldom out of stock positions.

RESEARCH AND DEVELOPMENT

On our own departement R&D new products are developed. Besides developing and testing new concepts, there is also done field research e.g. for testing and improving new conductors.

Field research



TÜV NEDERLAND

Koltec B.V.

Breda

has demonstrated a quality management system which complies with the requirements of the standard:

NEN-EN ISO 9001:2015

The quality management system has been evaluated according to TÜV Nederland certification procedure for the following scope:

The designing, production and sales of electric fencers, electrostimulation equipment and fencing accessories.

This certification is subjected to an annual evaluation by TÜV Nederland.

Certificate registration number:	26895/1.3
Date of issue :	15-06-2017
Valid till :	15-06-2020
Date of first certificate :	

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Dhr. E.W.A.C. Franken

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RvA C 029

ISO 9001

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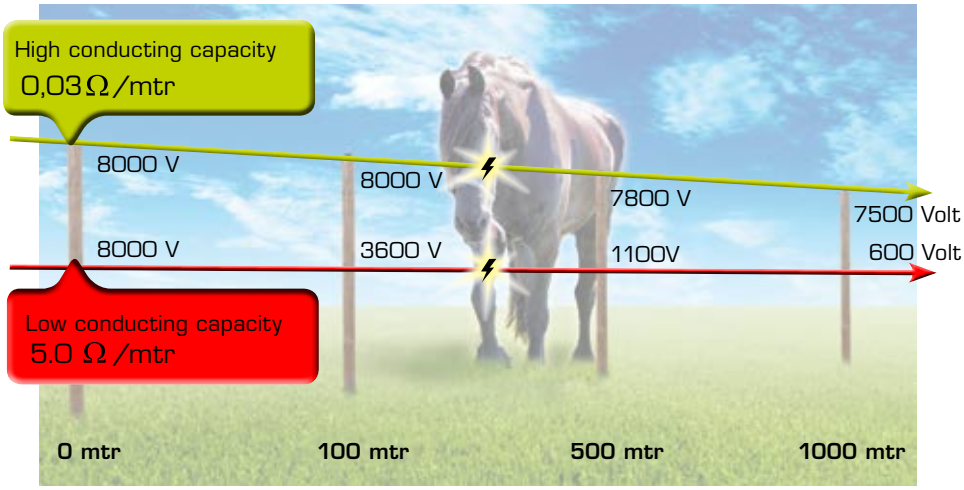
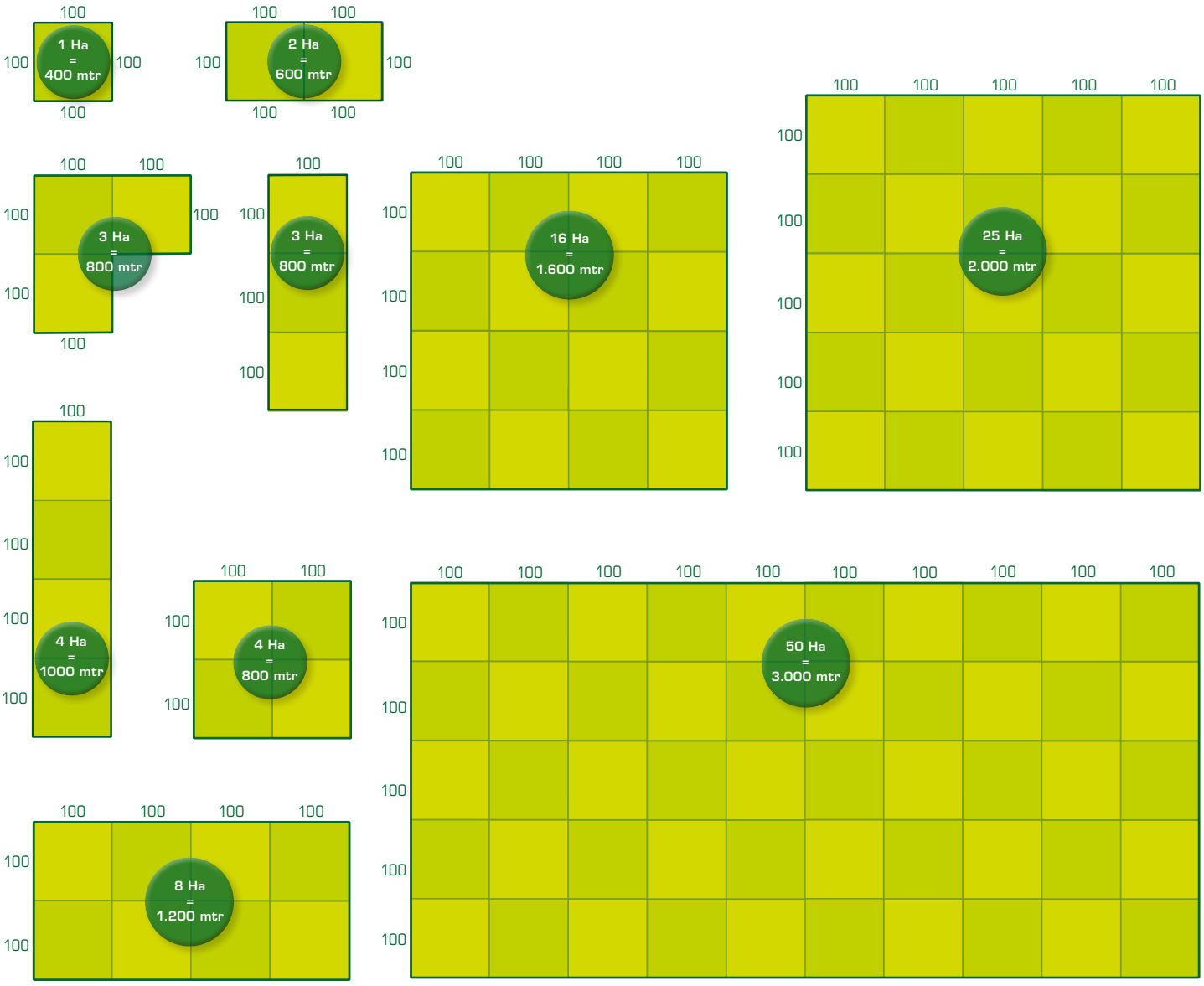
Example indication of difference in conducting capacity



CEE Application length

This is the length of your fence, based on an ideal wire at one meter and at 20 degree celcius, where the tension at the end of the wire is still 1.500 Volt. This length will be shorter with wires on lower heights, vegetation growth and wire with a higher resistance. The length will again be influenced negative by the use of poly wire with a higher resistance.

Application length (Single):



Energisers

Supply on 230 Volt Mains

Supply on 9 or 12 Volt battery, consumption is less than 50 mA

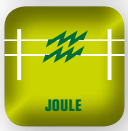
Supply on 12 Volt battery, consumption is higher than 50 mA

Consumption in milliampère (mA) or Watt

Peak power, the tension without connection to a complete fence

Tension that remains after the touch of an animal (500 Ohm)

Stored energy, energy that is gathered out of the supply source



Impulse energy, the energy max. produced by the device when touched by an animal (500 Ohm)

Info by digital display

Alarm at tension drop under 2.000 Volt

On/off switch at hand

Third connection with half output tension

High-low-switch, which switches automatically based on the light.

High-low-switch for energy saving

Changing tension levels in case of growth and other short circuits

Growths indication by LED

Charge indication of the battery

Also mains option

Solar panel at hand or optional

Battery control function

Build-in lightning diverter

Safety time delay for the boost function

Discharge protection, takes care that the battery is not charged lower than 10,5 Volt.

Maximum fence length in Km according CEE statement (Capacitive)

2 year warranty on energisers

Maximum fence length in Km by no growth on a fence

Connection set enclosed

Maximum fence length in Km average growth on a fence

Return voltage measuring

Above-mentioned fence lengths, as mentioned at the devices, are based on the use of steel wire in a multi wire fence.

Volt
The unity of electric power is Volt. With electric fencing one uses the power to transfer the energy.
Power U (V=Volt)= Energy I (A=Ampere) x Resistance R (Ω=Ohm).

Joule
Energy which is being put off as power to the wire per shock/impulse, one measures in Joules. 1 Joule = 1 Watt (W) per second,= $R^*\int I^2 dt$
One feels this energy when one is touching the fence wire.
.

Loading or stored energy
The loading energy of the fencer shows how much energy is being absorbed from the power source (mains, (wet) battery) into the capacitor. A higher stored energy means that the fencer uses more energy. The proportion between stored energy and the impulse energy shows the efficiency of the fencer. A high proportion means that much energy is getting lost, and not applied to the conductors.

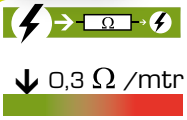
Impulse energy
Through the discharge of the capacitor the fencer transfers the stored energy to the conductors (wire, tape, rope etc.). One calls this shock/impulse discharge energy, also known as impulse energy. The impulse energy is often shown unloaded. Officially the impulse energy, which remains with a resistance of 500 Ohm, has to be shown. This value determines the real strength of the fencer, the shock that the animal feels when it is touching the electric fence.

Conductors

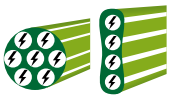
Suitable for longer fences

Suitable for fences with a maximum fence length of 200 mtr

Cross, vertical connection that connects the horizontal connectors



Indication **resistance** in Ohm per (Kilo) Meter. A lower number means less resistance and therefore more current/volts over a longer distance.
The further the arrow points to red, the higher the resistance of this product.

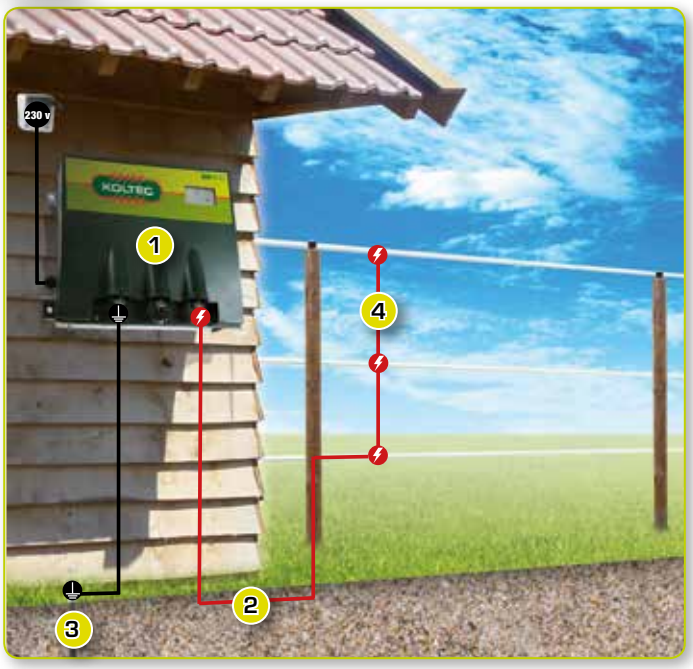

Number of connectors in or round wire, rope or tape.
More and thicker connectors means a better current transit
The material can exist out of INOX or copper (Cu).

Breaking strength (pull weight)
Indication of the breakpoint in Kilogram.

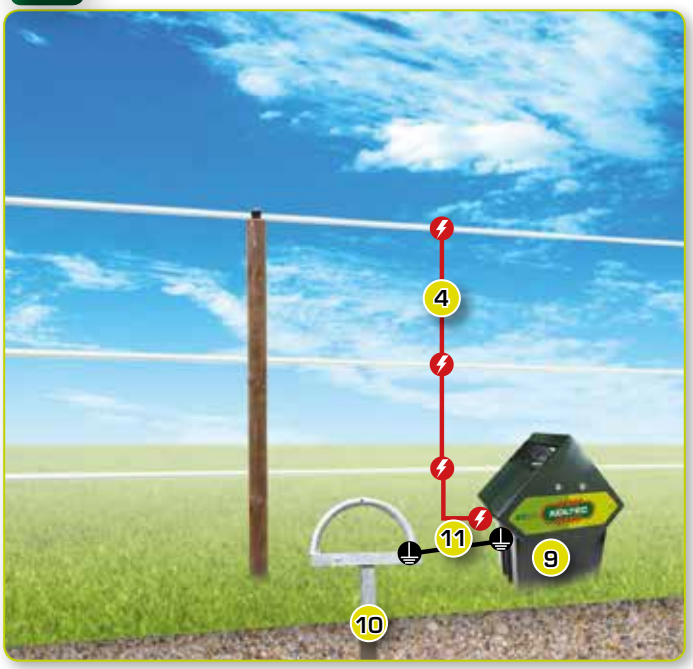
Resistance
The resistance is being measured in Ohm (R). The resistance slows the energy down. R=U/I. No resistance means short circuit, 1.000.000 Ω means a good insulation. An animal or a person has an average resistance of about 500 R. For this reason the power and the impulse energy with this resistance are the relevant values to compare electric fencers. Also conductors like wire, tape and rope have a resistance. The resistance of the various conductors is different. Aluminum wire has a very low resistance and is therefore most suitable for very long fences.

PE:
Conductors constructed with Polyethyleen wires have a long endurance.

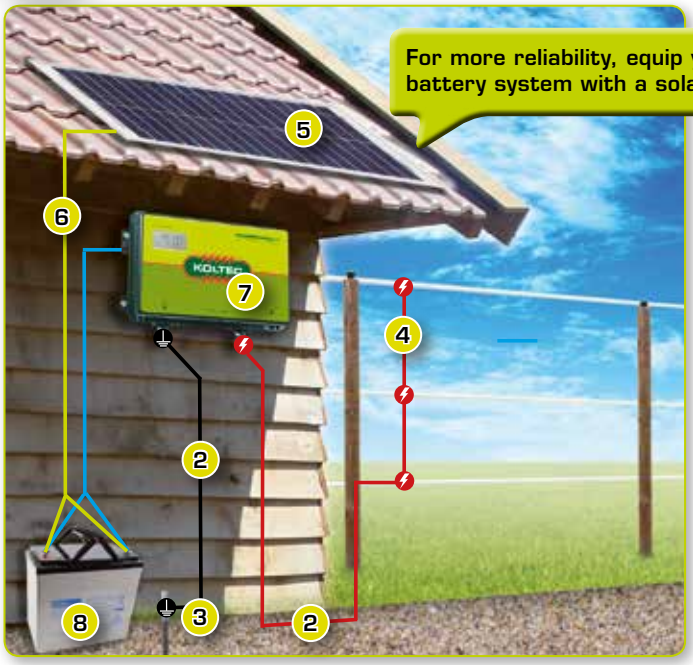
MAINS ENERGISERS 230 VOLT

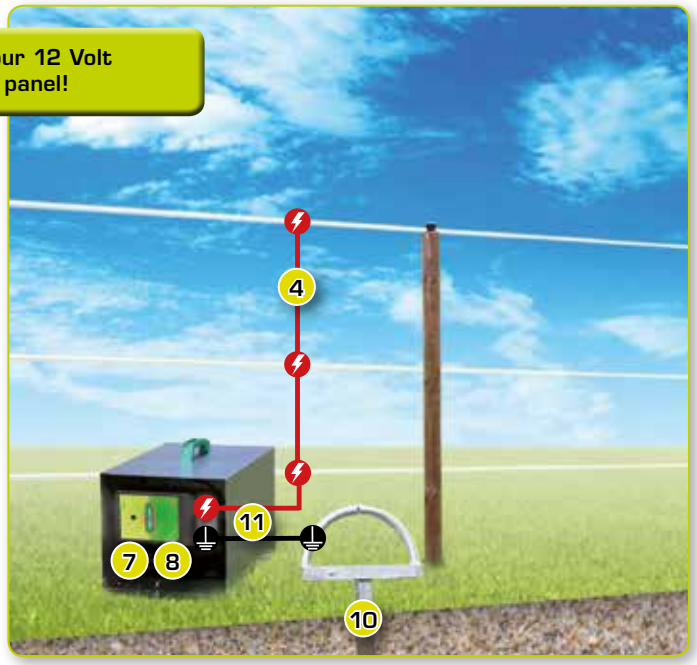


BATTERY ENERGISERS 9-12 VOLT



WET CELL BATTERY ENERGISERS 12 VOLT



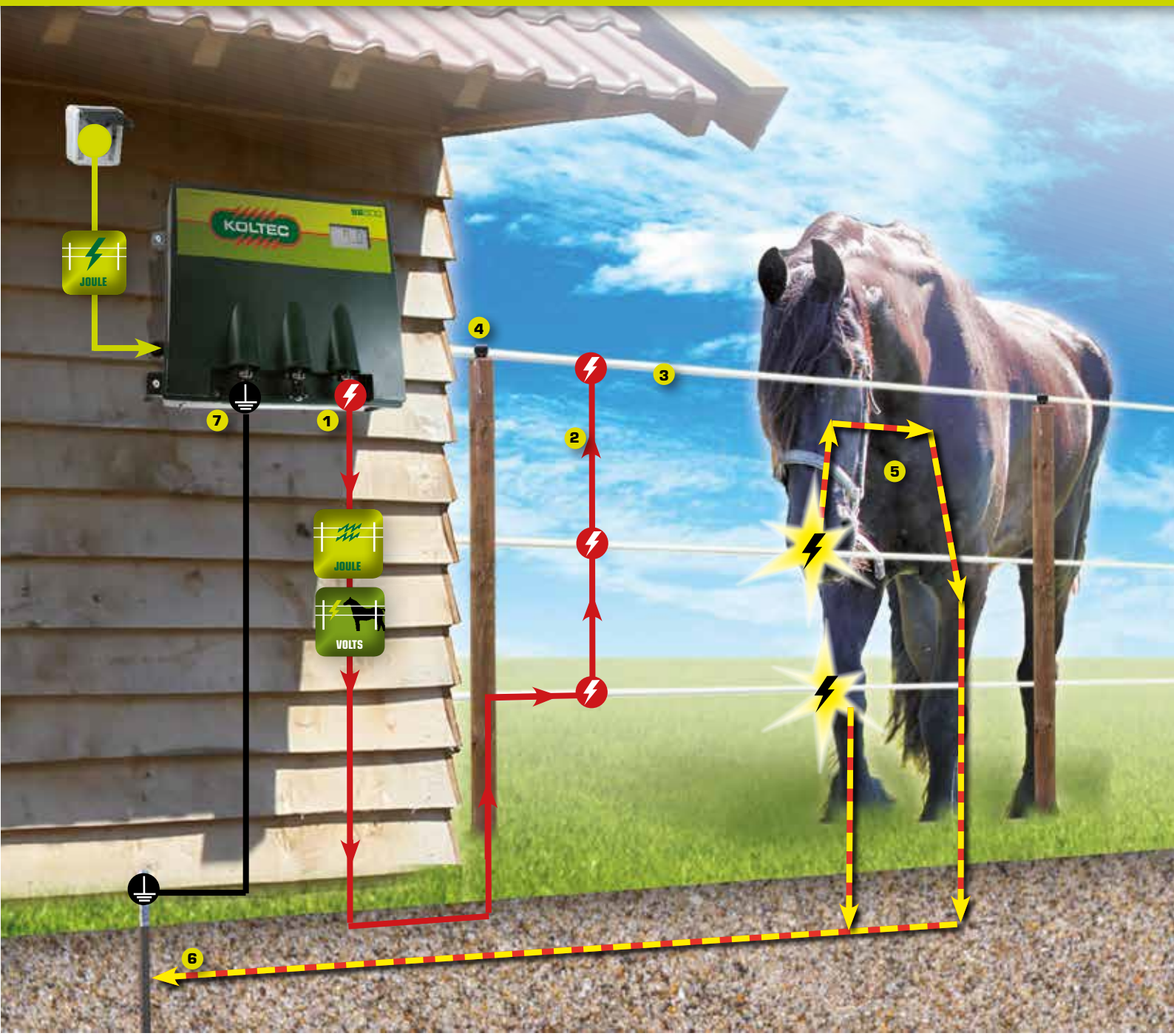


1. **MAINS ENERGISER** (See from page 10)
2. **HIGHTENSION CABLE** (See page 35)
3. **EARTH STAKE** (See page 39)
4. **LINKING KIT** (See page 86)
5. **SOLAR PANEL** (See page 26)
6. **EXTENSION CABLE** (See page 26)
7. **WET CELL BATTERY ENERGISER** (See page 19)
8. **WET CELL BATTERY** (See page 24)
9. **BATTERY ENERGISER** (See page 28)
10. **MOBILE EARTH STAKE** (See page 39)
11. **CONNECTION KIT** (See page 36)

KOLTEC TIP

If you have to connect your device to the grid by bridging a distance over 25 meter use the high voltage cable with 2.5 mm solid core.

Optional connection of lightning diverter and/or switch, see page 37.



An electric fence is simple, fast and cheap to build comparing to a mechanical fence. The electric pulse takes care that the animals stay away from the fence. Your fence hardly will be damaged and will last longer.

The shock from an electric fence system is achieved by making short-circuit.
This goes as follows:

For the connection of your energiser see page 6

1 The energiser gives current pulses.
2 These impulses are fed through a connection cable to the fence.
3 The fence consists of conducting materials, often steel, stainless steel or copper, sometimes incorporated in synthetic materials, like poly rope, poly tape and poly wire.
4 The insulators on the posts prevent the fence to connect with earth.
5 When an animal touches the fence, the current pulses go through the body to earth.
6 Through the ground (earth) the current pulses go to the earthpin(s).
7 The earthpin is connected with the earth output of the fencer, with which the circuit is closed.

For the importance of earthing see page 38

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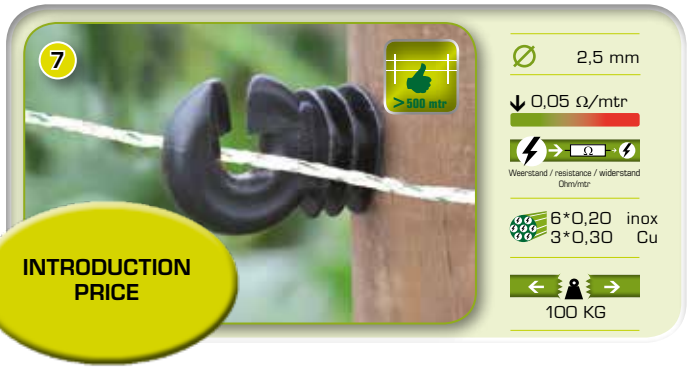


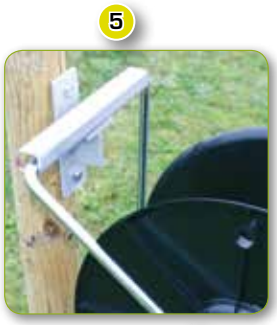


Photo	Art.nr.	Description	PU	
1	160-81450	MS50 mobile solar fencer	1	
2	162-60020	Support bracket MS-Serie	1	
3	162-60022	Support bracket for reel 162-39026	1	
4	162-60021	Support bracket for reel 162-39024 & 25	1	
5	162-60023	Support bracket for reel 162-39029	1	
6	162-60024	Support bracket for reel 162-39027 & 31	1	
7	162-39121	Wire, braided, white/green 200 mtr ± 2,5 mm, 24 PE + 6*0,2 INOX + 3*0,30 Cu	200	
8	162-79010-2	Gate handle, black with fixed tape clamp, per 2 pieces	2	
9	162-79038	Gate handle KOLTEC, white	1	
10	162-79039	Gate handle KOLTEC, white INOX	1	

PU=Package Unit Price incl. VAT

Photo	Art.nr.	Description	PU	
1	162-80165	Pigtail post, spring steel, white 105 cm 6 mm, heavy galvanized	1	
2	162-80172-4	Corner insulator for tape, with strain handles, 4 pieces	4	
3	162-80173-3	Tape strainer, synthetic	3	
4	162-80171-3	Corner roller, synthetic for wire	3	
5	162-80176-2	Wire strainer for thin synthetic wire	2	
6	162-39034-4	Wire connectors for thin wire	4	
7	162-80167-4	Pin lock insulator, with gate handle anchor and connection nut	4	
8	162-79990	Elastic rope kit for 4,5 mtr, 10 mm brown INOX	1	
9	162-79991	Elastic rope kit for 4,5 mtr, 10 mm white INOX	1	
10	162-80166-10	Pin lock insulator, heavy duty 10 pieces	10	

PU=Package Unit Price incl. VAT

As from 1 September 2010 producers are obliged to build in new security arrangements in their energisers. Apparatus that are built after this date may supply maximum 5 Joule under heavy circumstances to secure the safety of animals and men in case they get tangled in the fence.

If the circumstances are so heavy that 5 Joule is not enough for an effective fence, than it is allowed to upgrade the controlled power till a maximum of15 Joule at 100 Ohm or less. The upgrade of power may only take place after a time delay and at the same time a warning signal. This signal will go on for a period of minimum 10 minutes, before the energiser switches this alarm off en goes back to the normal rhythm. Apparatus that are able to do this have a so called "Time Delay" function.

This function is meant to give men and animal more time to free themselves of the fence, without being exposed to the maximum power of the fencer.
The TD1500 and the TD1000 meets this stern demands to switch to their maximum power.

TIME DELAY SERIE

The newest generation KOLTEC energisers are built according the most recent European standard. They offer maximum power for an optimal security also under less opportune circumstances. The energisers are built reliable and solid. With a loading energy off max. 23 Joule and a very high tension under all circumstance an effective fencer. In case the fence is not installed in a closed ring, the return tension can also be measured. Problems in the fence will be quickly noticed this way.

- Maximum power
- Optimal security by the "Time Delay" function
- Acoustic and digital alarm
- Maximum security by the power boost function
- Digital display for the outbound and return voltage
- Prepared for extended security functions
- Prepared for the connection of a back-up wet cell battery
- Built-in loading unit for external (Back-up) wet cell batteries

2

Compose your own electric fence
www.koltec-electricfencing.com/configurator

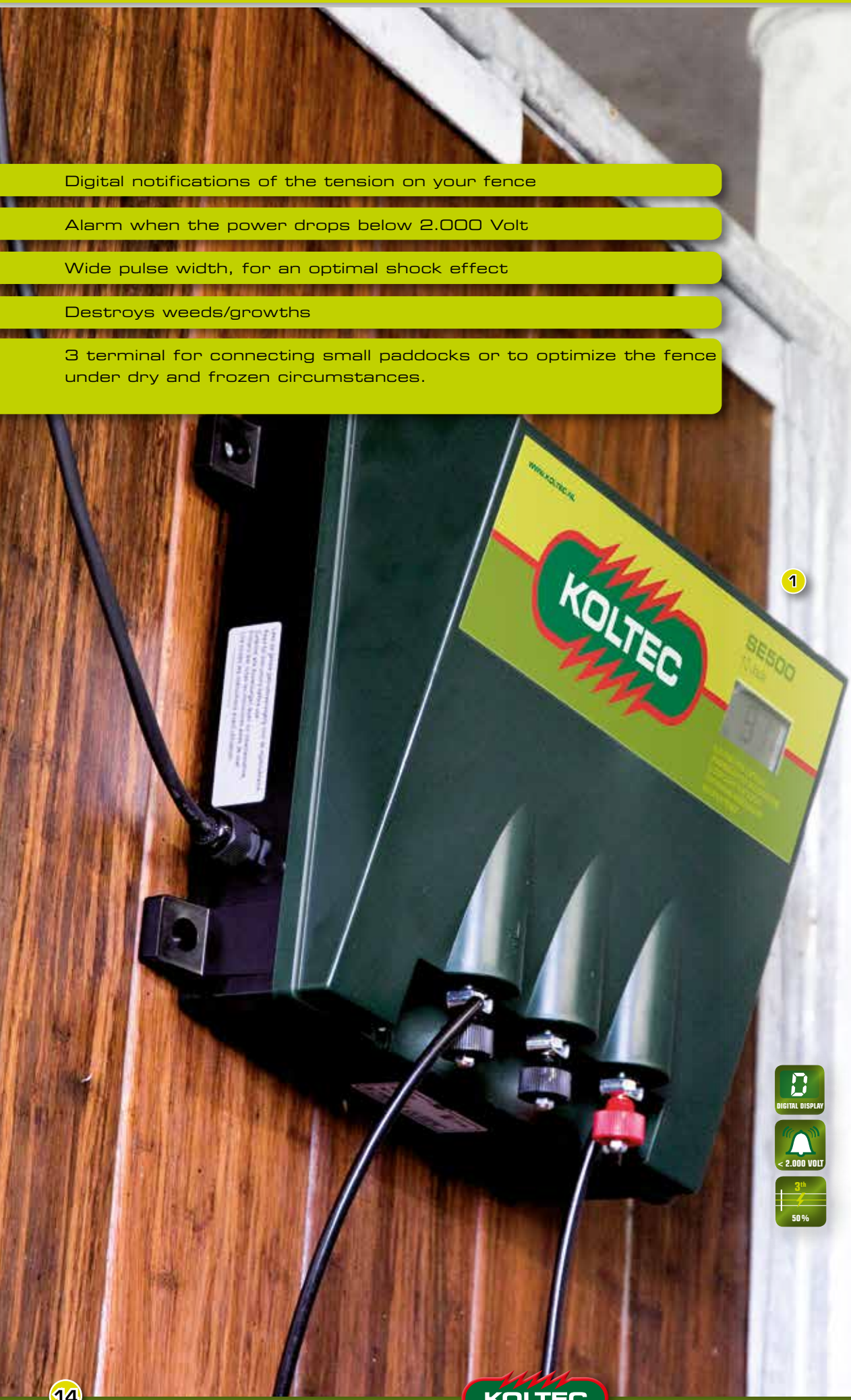
3. BACK-UP KIT

The TD-fencers are used in situations that require maximum reliability. The risk of power failure can be overcome by connecting the fencer to a back-up wet cell battery. You need this kit to connect your TD-fencer to a back-up wet cell battery. In the TD-fencer a wet cell battery charger is built-in that assures your wet cell battery to stay charged all the time and shall perform maximally in case of power failure. In principal every 12 Volt wet cell battery can be connected. The capacity of the wet cell battery determines at the end how long the fencer, by power failure, will be able to function.

	230 VOLT	VOLTS	VOLTS	JOULE	100 OHM JOULE	500 OHM JOULE	CEE Km	Km	Km
TD1500	230	9.000	**8.000**	23	**15**	5	350	75	25
TD1000	230	9.000	**8.000**	16	**10**	5	250	50	17

Photo	Art.nr.	Description	PU	
1	161-83060	Mains fencer KOLTEC TD1500	1	
2	161-83050	Mains fencer KOLTEC TD1000	1	
3	162-85475	Backup cable kit	1	

- Digital notifications of the tension on your fence
- Alarm when the power drops below 2.000 Volt
- Wide pulse width, for an optimal shock effect
- Destroys weeds/growths
- 3 terminal for connecting small paddocks or to optimize the fence under dry and frozen circumstances.



SE SERIES

The SE-series consists of devices for professional fences on mains power. These fencers are very effective because of the wide pulse. By this the given energy is very well transmitted. This quality makes the series extremely suitable for difficult circumstances. The SE-series is provided with an extra terminal for connecting a small paddock or second wire on half power for optimal functioning with dry or frozen soils. The devices are economical in use and have a solid, splash proof housing.

1.SE500/ SE440/ SE340.
The SE500, SE440 and SE340 are provided with a display and alarm. With the display all the necessary information about the fence is directly visible. If there really is a problem and the tension drops below the 2.000 Volt, the alarm will go off. This is a sign to check the fence immediately

2. SE425
The SE425 is a strong device, without frills, comparable to the SE500. Because of the wide energy pulse the shock effect is very good. Extremely suitable for animals which are difficult to keep such as sheep and Shetland ponies in a large meadow. Ideal fencer for users wanting a strong, affordable device, but don't care about digital read out or alarm.

SE500	230	11	10.000	**4.600**	10	**6,2**	300	25	8
SE440	230	10	9.000	**4.000**	6	**4,4**	200	20	5
SE340	230	6	9.000	**3.500**	5	**3,4**	150	15	4
SE425	230	10	9.200	**4.000**	10	**5,4**	300	25	7

Photo	Art.nr.	Description	PU	
1	161-83040	Energiser KOLTEC SE500 mains	1	
2	161-83030	Energiser KOLTEC SE440 mains	1	
3	161-83020	Energiser KOLTEC SE340 mains	1	
4	161-82651	Energiser KOLTEC SE425 mains	1	

PU=Package Unit Price incl. VAT

CSIKOS SERIES

KOLTEC has developed mains operating fencers, specially for horses which meet the needs for animal friendliness and safety.

Horses are sensitive animals, which are being kept behind clearly visible conductors such as tape and rope. Horses can detect quickly if the conductor is under tension or not. Therefore you need a reliable KOLTEC fencer, to keep your animals at all times in their paddocks.

Digital Display

What is the function of it?

- It gives you information about your fence situation in a split second.
- Displays the real tension on your fence.

1. CSIKOS DIGITAL
A powerful fencer with a peak voltage of 8.800 Volt and a stored energy of 6 Joules.
Is suitable for all kinds of animals and has a digital display to monitor proper operation of the fencer.

2. CSIKOS XP
Csikos XP, the horse keeper pre-eminently. It is suitable for long fencing.
With a stored energy of 5 Joule and a peak voltage of 8.800 Volt strong and sufficiently energetic to keep difficult fences under tension.

3. CSIKOS
Mains operating fencer especially developed for small to medium-sized horse meadows or paddocks. The fencer supplies, with a stored energy of 2 Joule, a peak voltage of 6.000 Volt.

4. ES10
Mains operating fencer especially developed for paddocks. The fencer supplies, with a stored energy of 1 Joule, a peak voltage of 8.300 Volt.

	230 VOLT	Watt	VOLTS	VOLTS	JOULE	JOULE	CEE Km	Km	Km
CSIKOS DIGITAL	230	6	8.800	**4.100**	6	**3,0**	150	15	3,0
CSIKOS XP	230	3	8.800	**4.100**	5	**2,5**	150	12	2,5
CSIKOS	230	1	6.000	**2.750**	2	**1,3**	100	3	0,8
ES10	230	0,5	8.300	**3.000**	1	**0,6**	40	1	0,4

Photo	Art.nr.	Description	PU	
1	161-82200	Energiser KOLTEC Csikos Digital mains	1	
2	161-82296	Energiser KOLTEC Csikos XP mains	1	
3	161-82310	Energiser KOLTEC Csikos mains	1	
4	161-82140	Energiser KOLTEC ES10 1,0J mains	1	

PU=Package Unit Price incl. VAT

HORSE TRAINER

This device is specially developed for horse exercisers. The tension and with that the energy, can be adjusted continuously. The device is adjustable to the sensitivity of the horses. The tension is adjustable from 300 Volt up to 8,000 Volt.
The impulse energy from 0.02 up to 1.0 Joule (at 500 Ohm). The digital display is showing the adjusted tension.

EXERCISER
For the proper function of a treadmill the availability of an energiser is recommended. If the tension does not need to be adapted to the different animals then the **ES10 (3)** mains power device is a widely used device. Some mills have a construction which does not allow the mounting of an energiser on the outside in a permanent exhibition. In that situation a battery device like the **HB15 (2)** can solve this. It works with the mill and provides the round-up fences with tension.

COW TRAINER

Many modern livestock farms have in their stable round-up gates and selection boxes. To work efficiently, the cows sometimes need to be stimulated to keep the tempo and go in the right direction The **COW TRAINER** of **KOLTEC** assists in this. The device is powered with a 12 or 24-Volt DC power supply system.

Through years of experience the energy delivery and voltage are adjusted so that the cows have no "trauma" experience.

	230 VOLT	VOLT	9-12 VOLT DC	Watt / mA	VOLTS	VOLTS	JOULE	JOULE
HORSE TRAINER	230			1,9 W	8.000	0.3-4.0 kV	1,5	0,02-1,0
ES10	230			0,6 W	8.300	3.000	1,0	0,6
HB15			9-12	20 mA	9.200	2.000	0,20	0,15
COW TRAINER		12-24		10 mA	8.600	300	0,04	0,02

Photo	Art.nr.	Description	PU	
1	161-82150	Energiser KOLTEC Horse Trainer mains	1	
2	160-81010	Energiser KOLTEC HB15 0,15 J 9 / 12 Volt battery device	1	
3	161-82140	Energiser KOLTEC ES10 1,0J mains	1	
4	161-82891	Energiser KOLTEC Cow Trainer on 24 Volt with 5 mtr lead	1	
	161-82892	Energiser KOLTEC Cow Trainer on 12 Volt with 5 mtr lead	1	

PU=Package Unit Price incl. VAT

1. POWERGARD XP
A powerful and intelligent fence energiser. It increases fully automatic the voltage when the tension on the wire lowers below 4.000 Volt by touching or growth of plants. It switches back to its normal economical operation, as soon as the load is normal. Growth of grass or weeds will be scorched, while the energy consumption stays low. With the **built-in battery protector** your expensive battery is well protected.
With a tension of 5.800 Volt and 3,1 Joule at 500 Ohm a very powerful energiser. The display shows you alternating the tension on your application and the battery tension.

2. POWERGARD
A handy and powerful fence energiser for smaller area's, with more difficult anumals to keep like sheep and shetland pony's. It increases fully automatic the voltage when the tension on the wire lowers below 3.000 Volt by touching or growth of plants. It switches back to its normal economical operation, as soon as the load is normal. Growth of grass or weeds will be scorched, while the energy consumption stays low. The **built-in battery protector** protects your expensive battery against discharge below the critical level.
Incl. support bracket

Compose your own electric fence
www.koltec-electricfencing.com/configurator

	12 VOLT DC	mA	VOLTS	VOLTS	JOULE	JOULE	SOLAR	CEE Km	Km	Km
POWERGARD XP	12	140-190	8.800	**5.800**	4,85	**3,1**	20 W	120	20	5,0
POWERGARD	12	70-120	8.500	**3.200**	2,0	**1,5**	10 W	85	5	1,5

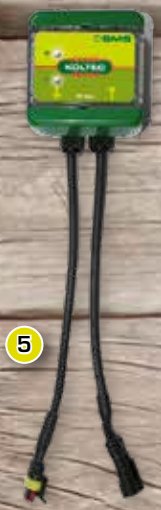
Photo	Art.nr.	Description	PU	
1	160-81087	Energiser KOLTEC Powergard XP 2,5 J 12 Volt battery device	1	
2	160-81074	Energiser KOLTEC Powergard 1,5 J 12 Volt battery device	1	
3	162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	
4	135-39993	Adapter DC 12 Volt with con. PG series	1	
5	162-85474	SMS-Switch + GPS module 12 Volt	1	
7	162-60002	Bracket for mounting Powergard	1	
8	162-60004	Bracket for mounting Powergard XP	1	
6	152-80003	Connection cable for wet cell batteries, repl. for Powergard, PG-serie and solar panels	1	

PG SERIES

The PG wet cell battery powered devices are kombi-fencers that function on 12 Volt wet cell batteries as well as mainstream. Small, handy devices that can be adjusted to a wall or post in a simple way.

The control light informs you about the condition of the battery. When it flashes green everything is all right, when it flashes red the battery needs to be recharged.

The PG series is also equipped with a battery protector, which prevents the battery to become discharged below the critical level of 10,5 Volt.
This prevents damage and prolongs the life of the battery. To keep the battery charged without looking after it you can add a solar panel. As an option a 12 Volt DC adapter is available to make the PG devices function on mainstream also.
This adapter can be easily switched with the battery cable.



	12 VOLT DC	mA	VOLTS	VOLTS	JOULE	JOULE	SOLAR	CEE Km	Km	Km
PG100	12	120	9.400	**5.000**	1,50	**1,0**	10 W	45	3	0,8
PG50	12	50	8.500	**2.800**	0,75	**0,5**	10 W	30	1	0,4

Photo	Art.nr.	Description	PU	
1	160-81065	Energiser KOLTEC PG100 12 Volt battery device	1	
2	160-81081	Energiser KOLTEC PG50 12 Volt battery device	1	
3	135-39993	Adapter DC 12 Volt with con. PG series	1	
4	162-85508	Extension cable for solar panels, 5 mtr incl. connectors	1	
	162-85509	Extension cable for solar panels, 10 mtr incl. connectors	1	
5	162-85474	SMS-Switch + GPS module 12 Volt	1	
6	152-80003	Connection cable for wet cell batteries, replacement for Powergard, PG-serie and solar	1	

PU=Package Unit Price incl. VAT

CARRY CASE
A sturdy case to mount a Powergard XP, Powergard or PG fencer in combination with a wet cell battery. Easy to carry due to 2 carry handles. The case is made of sendzimir plate material, which has a very good resistance against corrosion.

With the extra available accessory it is very easy to mount a 10 or 20 Watt solar panel on top of the case. With this you create a complete and handy solar unit which is very easy to transport.

Photo	Art.nr.	Description	PU	
1	162-60015	Box to carry a wet cell battery and/or Powergard XP, Powergard or PG energiser	1	
2	162-60019	Solar backet for carry case	1	

HS75 SOLAR KIT

External supply:
- 12 Volt battery
- mains operating
- solar panel

Battery protector

Energy saver

Charge indicator

Load indication for external power sources

Power booster

The HS75 is a multi-functional wet cell battery fencer. Because of the solar panel you do not need to look after the fencer. The also supplied 12 V- 12 AH battery provides the energy supply during the night and dark days.

Ideal for temporarily, mobile utilization where a fairly powerful device is wanted. With the built-in charge regulator and battery protector the battery is protected against overloading and discharging. With a peak voltage of 8.200 Volt and a stored energy of 0,75 Joule and 2.500 Volt with max 0,5 Joule at 500 Ohm a powerful fencer for medium-sized meadows. Delivered with 12 Volt battery, 5 or 10 Watt solar panel, 24 Volt DC adapter, a high quality connection set, warn sign and mounting base.

HS75 10 WATT SOLARSET
If the HS75 with solar panel is used the whole year around, it is to be recommended to use a larger solar panel. In the winter months it is so dark that a 5 Watt solar panel does not have enough capacity to keep the battery charged. If interim recharging with the adapter is not wanted, than the HS75 with a 10 Watt solar panel is highly recommended.

	12 VOLT DC	mA	VOLTS	VOLTS	JOULE	JOULE	CEE Km	Km	Km
HS75	12 - 24	40	8.200	**2.500**	0,75	**0,15-0,5**	25	1,2	0,6

Photo	Art.nr.	Description	PU	
1	160-81310	Solar kit KOLTEC HS75 with 10 Watt solar panel	1	
2	160-81305	Solar kit KOLTEC HS75 with 5 Watt solar panel	1	
3	162-85508	Extension cable for solar panels, 5 mtr incl. connectors	1	
	162-85509	Extension cable for solar panels, 10 mtr incl. connectors	1	
4	162-80197	Earth stake, 75 cm, for mobile devices	1	

PU=Package Unit Price incl. VAT

MS SERIE
Three compact solar fencers, very usable for mobile applications. With an integrated solar panel that keeps the wet-cell battery charged during the meadow season.

A solid housing that can be placed on the ground, but has also possibilities to hang it on a post or wall. With 0,18, 0,33 and 0,65 Joule loading energy and a relatively high tension, suitable for short and middle long fences.

For the winter months a charger is supplied also to charge the wet-cell battery extra in this period.

Delivery incl.

- Wet-cell battery 12 volt 7 Ah or 12 Ah
- Connection set
- Wet-cell battery charger
- Warning sign
- Mounting screws

	12 VOLT DC	mA	VOLTS	VOLTS	JOULE	JOULE	CEE Km	Km	Km
MS50	12	50	11.000	**3.600**	0,65	**0,50**	18,0	1,6	0,8
MS25	12	40	9.000	**3.100**	0,33	**0,25**	8,5	0,8	0,4
MS15	12	30	7.500	**2.500**	0,18	**0,15**	3,7	0,4	0,2

Photo	Art.nr.	Description	PU	
1	160-81450	Solar device KOLTEC MS50, with 10 Watt solar panel	1	
2	160-81425	Solar device KOLTEC MS25, with 5 Watt solar panel	1	
3	160-81415	Solar device KOLTEC MS15, with 2,5 Watt solar panel	1	
4	162-60020	Support for mounting the MS-series to a post	1	

1 - 4 TRACTION-BATTERY
The traction battery is also called deep-cycle battery or light battery. The battery is made to deliver long-term power.
A traction battery can be discharged up to 80% without damage. How many times a battery can be charged and discharged is called the "cyclic power" of a battery. This is with a traction battery approx. 4 times higher than with a start battery.
A battery is empty when operating (in charge) it cannot deliver more than 80% (9.6 volts) of
the specified voltage (12 Volt).

Temperature
The capacity of a wet cell battery decreases under influence of temperature. By -10 C this is 25% lower and there is also needed a higher charge tension to get the wet cell battery optimal loaded.

5 - 6 START-BATTERIE
A start-battery is meant to start a car or tractor. The battery is made to deliver shortly a high Amperage (current). This type of accumulators is less suitable for a prolonged constant current supply, the battery will be discharged too far.
By strong discharge the capacity strongly goes backwards due to sulfation. Once this happens the battery is very quickly ruined! For that reason **KOLTEC** has equipped all wet cell battery powered energisers with a protection against discharging below the critical level. It is recommended that a start battery does not go beyond 20% discharge.

7. CTEC BATTERY CHARGER
The CTEK wet-cell battery charger is small, but extremely efficient. The charger will load up to 5,0 Ampère per hour. Adjustable for small lead-gel wet-cell batteries as for the heavy start wet-cell batteries. Re-conditioning is an option for having to deeply discharged wet-cell batteries somewhat function again.

Photo	Art.nr.	Description	PU	
1	163-45530	Cycle battery 12 Volt 12 Ah Lead-acid, 150*120*150 mm/3,8 kg	1	
2	163-45541	Cycle battery 12 Volt - 24 Ah maintenance free, 167*175*125 mm/9,5 kg	1	
3	163-45531	Cycle battery 12 Volt - 55 Ah, 240*175*200 mm/17,3 kg	1	
4	163-45538	Cycle battery 12 Volt - 110 Ah, 275*175*250 mm/32,6 kg	1	
5	163-45539	Battery, maintenance free, 12 Volt - 44 Ah, 207*175*175 mm/11,2 kg	1	
6	163-45540	Battery, maintenance free 12 Volt - 72 Ah, 278*175*175 mm/16,3 kg	1	
7	162-85520	Cetec MXS 5.0 battery charger, max. 5.0 A charge current	1	
8	135-45051	Battery pince, plastic, red	1	
	135-45052	Battery pince, plastic, black	1	
	135-45053	Battery pince, plastic, green	1	

12 Volt battery energiser
(See also Page 24-27)

Create reliability with a solar panel
(See also Page 28)

Advised battery
(See also Page 26)

Working period (Indication)
Winter time -/- 25%

Powergard XP

20 watt + 20 watt + 20 watt	12V - 110 Ah Traction battery	Unlimited / Unlimited
	12V - 72 Ah	21 days / 16 days
	12V - 110 Ah Traction battery	32 days / 24 days

Powergard

10 watt + 10 watt + 10 watt	12V - 55 Ah Traction battery	Unlimited / Unlimited
	12V - 55 Ah Traction battery	Unlimited / Unlimited
	12V - 72 Ah	42 days / 25 days
	12V - 110 Ah Traction battery	65 days / 38 days

PG 100

10 watt + 10 watt + 10 watt	12V - 55 Ah Traction battery	Unlimited / Unlimited
	12V - 55 Ah Traction battery	Unlimited / Unlimited
	12V - 72 Ah	25 days / 25 days
	12V - 110 Ah Traction battery	38 days / 38 days

PG 50

10 watt + 10 watt + 10 watt	12V - 55 Ah Traction battery	Unlimited / Unlimited
	12V - 72 Ah	60 days / 60 days
	12V - 44 Ah	36 days / 36 days

SOLAR ENERGY

Solar energy as power source for your fence.

There are various reasons for combining a battery operating fencer with a solar panel:

- The section is far from home
- There is no electric power in the area
- You are not able to check the fence on a regular basis
- It is not possible for you to regularly change the battery for reloading this at home

A battery operating electric fencer combined with a solar panel can function during the whole season maintenance free, without looking after it.
Also in Northern-Europe the sun supplies enough energy/light in order to charge up the battery sufficiently during daylight. Therefore the battery continuously supplies enough electric current in order to keep your fence under power day and night.

All KOLTEC car battery powered fencers can be connected to a KOLTEC solar panel.

1. 45 WATT SOLAR PANEL
Suitable for charging rechargeable batteries of fencers or other equipment with a max. consumption of 450 mA. Incl. electronic charge and discharge regulator

2. 30 WATT SOLAR PANEL
Suitable for charging rechargeable batteries of fencers or other equipment with a max. consumption of 300 mA. Incl. electronic charge and discharge regulator

3. 20 WATT SOLAR PANEL
This panel is suitable for charging the Powergard CC and the Powergard XP in combination with a battery. The panel can be connected directly with the battery. The panel is supplied with a charge regulator. The different mounting frames you find on page 27.

4. 10 WATT SOLAR PANEL
This panel is suitable for charging the Powergard in combination with a battery. The panel can be connected directly with the battery. The panel is supplied with a charge regulator.

5. 5 WATT SOLAR PANEL
This 5 Watt solar panel forms in combination with the connection cable 162-60010, the basic to turn your battery fencer into a professional solar set. This panel also turns your HS75 fencer into a full solar unit.

6. EXTENSION CABLE
Extension cable for 10, 20, 30 and 45 Watt panels, to increase the distance between the panel and the battery. The connectors are IP67 proof.

7. 5 WATT SOLAR KIT
Handy kit to turn around your 12 Volt dry battery device into a solar unit. The kit contains a 5 Watt panel, 12 Volt – 12 Ah gel-battery and a connection kit.

Photo	Art.nr.	Description	PU	
1	162-85513	Solar panel 45 Watt incl. charge regulator, various applications, 68.6*54.5 cm 4.6 kg	1	
2	162-85514	Solar panel 30 Watt incl. charge regulator, various applications, 55.5*52.5 cm 3.7 kg	1	
3	162-85515	Solar panel 20 Watt incl. charge regulator for Powergard XP, 47.7*36.8 cm 2.6 kg	1	
4	162-85516	Solar panel 10 Watt incl. charge regulator for Powergard, 36.8*31.0 cm 1.9 kg	1	
	162-85518	Solar panel 10 Watt without regulator, specially for HS75, 36.8*31.0 cm 1.9 kg	1	
5	162-85517	Solar panel 5 Watt without regulator, for battery devices and HS75, 32.1*20.3 cm 1.0 kg	1	
6	162-85508	Extension cable for solar panels, 5 mtr incl. connectors	1	
	162-85509	Extension cable for solar panels, 10 mtr incl. connectors	1	
7	162-85507	Solar kit 5 Watt for (12 Volt) dry battery powered devices	1	
8	162-60005	Frame for mounting 5, 10 & 20 Watt solar panels	1	
9	152-80003	Connection cable for wet cell batteries, replacement for Powergard, PG-serie and solar panels	1	

PU=Package Unit Price incl. VAT

1. MOUNTING KIT
This kit with two brackets is suitable for larger solar panels. Ideal to mount the 30 & 45 Watt panels to a wall or roof.

2. MOUNTING FRAME
Separate frame on which the 5, 10 and 20 Watt offered solar panels can be mounted. This frame fits on the mounting post and mounting bracket. Is supplied standard with 10 and 20 Watt panels.

3. MOUNTING POST
Special post for a stable line up of a battery fencer in combination with a battery and/or solar panel.

4. ALUMINIUM POLE
Solar panels sometimes have far better use when they are placed a little higher.
This is also a limited form of theft prevention. The base pole is 2 meters high and equipped with clamps to mount on a wall or solid pole. The installation frame by KOLTEC fits on this pole. The extension set consists of 1 meter with connection pieces. The maximum total height that is recommended is 3 meters

5. MOUNTING BRACKET
Special bracket for mounting solar panels on a post or wall.

7. PLACING SET
A very handy portable metal box to carry a wet cell battery with or without a Powergard energiser.
Can be mounted to the mounting post.

8. THEFT PREVENTION CASE
The theft prevention case is build in a way that it can be electrified by the fencer. The case is mounted on top of a heavy duty earth rod of 120 cm. It is locked tot his post from the inside with a heavy M10 bold. The locking can be done with a padlock (Not supplied) In the bottem a hole is made to lead a high tension cable to the outside for connecting the fence. Dimensions of the case are W50*L50*H30 cm.

Inside the case there is space for a 12 Volt battery with the maximum dimensions of max. W25*H28*L48 cm.

Photo	Art.nr.	Description	PU	
1	162-85511	Mounting kit for 30 & 45 Watt panels	1	
2	162-60005	Frame for mounting 5, 10 & 20 Watt solar panels	1	
3	162-60003	Post for mounting Powergard and Powergard XP	1	
4	162-60017	Post for solar panels, 2 mtr, with mounting parts	1	
	162-60018	Extension kit 1 mtr for post solar panel	1	
5	162-60006	Bracket for mounting 5, 10 & 20 Watt solar panels on a wall	1	
6	162-60019	Solar bracket for carry case	1	
7	162-60015	Box to carry a wet cell battery and/or Powergard XP, Powergard or PG energiser	1	
8	162-60016	Box for theft prevention, electrifiable case	1	

PU=Package Unit Price incl. VAT

Energy consumption is very low

EC & HB/EB SERIES

The EC25, EC20, EB15 and HB15 battery powered energisers are technically very solidly built, stripped of all its frills, and very popular. The recognizable housing, in becoming a stylish camouflage is hardly noticed in the field. Almost every available power source can be connected to these apparatus.

All KOLTEC dry cell Battery energisers are delivered inclusive a high quality connection set, warn sign and mounting base.

1. EC25
This range's top model is supplied with a day-night automatic.
This saves much energy so that the battery lasts longer. It is suitable for all kinds of animals and types of fences. Suitable for all 9 Volt dry cell batteries. Also suitable for 12 Volt wet cell batteries and DC adapters with an output of 9-12 Volt. With a peak voltage of 9.900 Volt and stored energy of 0,35 Joule this is a very powerful fencer. Yet the consumption is not more than 35 mA.
***Battery recommendation: 9 Volt – 1.500 Wh (200 Ah)**

2. EC20
The EC20 is an all-round fencer deduced from the EC25. Suitable for all 9 Volt dry cell batteries. Also suitable for 12 Volt wet cell batteries. With a peak voltage of 9.900 Volt and stored energy of 0,30 Joule this is a powerful fencer. The consumption is 30 mA.
***Battery recommendation: 9 Volt – 1.500 Wh (200 Ah)**

Compose your own electric fence
www.koltec-electricfencing.com/configurator

Usage periode max. 231 days with advised battery*

Usage periode max. 198 days with advised battery*

Photo	Art.nr.	Description	PU	
1	160-81025	Energiser KOLTEC EC25 0,25 J 9 / 12 Volt battery device	1	
2	160-81023	Energiser KOLTEC EC20 0,2 J 9 / 12 Volt battery device	1	

PU=Package Unit Price incl. VAT

1

1. HB15
The HB15 is our step in battery fencer, very suitable for mobile applications and short fences because of its compactness. Only small types of batteries will fit. By means of the battery-leads 152-80017 this fencer can also be connected with an external 12 Volt wet cell battery.
It has a peak voltage of 9.200 Volt and stored energy of 0,20 Joule. The consumption is Approx. 20 mA.
***Battery recommendation: 9 Volt – 1.250 Wh (160 Ah)**

2. EB15
The EB15 is a small all-round fencer, very suitable for mobile use because of its compactness.
Only small types of batteries will fit. Also suitable for 12 Volt wet cell batteries. To supply it via mains use a DC adapter with an output of 9 – 12 Volt. With a peak voltage of 9.200 Volt and stored energy of 0,20 Joule this is a fine fencer. The consumption is 20mA.
***Battery recommendation: 9 Volt – 1.250 Wh (160 Ah)**

2

3

3. ST
One of the worlds most sold battery fence controller is still in production. Extremely solid mechanical working device. It will last a long time proving itself to be the most reliable fencer on the market. Only suitable for short fences (2,5 acre / 1 Ha) without growth of weeds or grass. Powered by round battery which lasts one full grazing season.
***Battery recommendation: 6 Volt – 510 Wh (100 Ah) alkaline.**

Not adapted for 7,5 Volt round alkaline batteries!!

4

*All usage periods in combination with different types of batteries see page 32

	9-12 VOLT DC	mA	VOLTS	VOLTS	JOULE	JOULE	CEE Km	Km	Km
EC25	9 - 12	35	9.900	**2.500**	0,35	**0,30**	18	0,8	0,2
EC20	9 - 12	30	9.900	**2.300**	0,30	**0,25**	13	0,6	0,2
HB15	9 - 12	20	9.200	**2.000**	0,20	**0,15**	8	0,4	-
EB15	9 - 12	20	9.200	**2.000**	0,20	**0,15**	8	0,4	-

Photo	Art.nr.	Description	PU	
1	160-81010	Energiser KOLTEC HB15 0,15 J 9 / 12 Volt battery device	1	
2	160-81020	Energiser KOLTEC EB15 0,15 J 9 / 12 Volt battery device	1	
3	160-81000	Energiser KOLTEC ST (Mushroom type) 6 Volt battery device	1	
4	153-60502	Battery container ST	1	

PU=Package Unit Price incl. VAT

ADVICE TABLE
FOR DRY CELL BATTERIES

Art.Nr	Type	Price	Tension	Energy	Capacity	Weigth	Shape	EC1000	EC2100	HB15/EB15
		Incl. VAT	Volt	Wh	Ah					
							Consumption in mA	15	18	20
163-45510	Saline		9,0	280	55	1,62	Small	86	72	65
163-45522	Alkaline		9,0	570	75	1,82	Small	176	147	132
163-45528	Saline		9,0	470	90	3,65	Big	145	120	x
163-45524	Alkaline		9,0	900	120	2,27	Small	278	231	208
163-45512	Saline		9,0	710	130	4,18	Big	219	183	x
163-45534	Alkaline		9,0	1250	160	2,67	Small	385	321	289
163-45532	Alkaline		9,0	1500	200	4,26	Big	463	386	x
163-45525	Alkaline		12,0	690	60	2,32	Small	x	133	119
163-45533	Alkaline		12,0	1380	120	4,45	Big	x	266	x
163-45501	Alkaline		6,0	510	100	1,70	Round	x	x	x
Suitable for 12 Volt car battery								No	Yes	Yes
In case of using a car battery, the following accessories are available:										
152-80017 Simple battery connection kit								x	Yes	Yes
162-60000 Battery connection kit with charge indication								x	Yes	Yes

For the energy supply of fencers we use mains, car batteries, solar units or dry cell batteries. If there is no mains available, energy supply by a dry cell battery is common use. Low cost and easy to transport. There are two types of dry cell batteries, saline and alkaline batteries. Both are air-oxygen batteries, they need oxygen out of the air to maintain a chemical reaction to produce the energy.

DIFFERENCES BETWEEN ALKALINE AND SALINE

Both types are free of mercury and cadmium and therefore environmental friendly, if it is disposed after usage at a offical disposal point. It is not allowed to dispose the batteries with consumer- or company garbage.

ADVANTAGE OF ALKALINE BATTERIES

• The most important advantage is the output tension. Alkaline batteries give a stable tension during the usage period. The tension of saline batteries drops from 8,4 Volt to 5,5 Volt (picture below). With a decreasing battery tension –which is the case for all saline batteries-, the fencer will take up more electrical current to maintain the declared output energy and this will result in accelerated battery discharge.

• The cathode and anode in an alkaline battery are much more efficient. This results in less material for the same capacity compared to saline batteries. Alkaline batteries weight therefore ca half less then saline batteries and are smaller. Due to this, less garbage is produced, also the transport costs are lower and the future disposal costs will be lower.

• The electrolyte of alkaline batteries contains less water than saline batteries, due to that alkaline batteries function better at lower temperatures.

• With a decreasing battery tension a fencer will use more energy to maintain the energy output. At a lower battery tension the internal resistance increases, due to that the energy uptake will increase accordingly. Alkaline batteries have due to an equal tension a lower energy use against saline batteries.

Advantages of alkaline against saline:

1. **Voltage stays the same**
2. **Less raw material, less weight**
3. **Performs better at lower temperatures**
4. **Consumption is lower**

EC20	EC25	ST	Other brands	
30	35	15	40	50
PERSISTENCE IN DAYS				
43	37	x	32	26
88	75	x	66	53
73	62	x	54	43
139	119	x	104	83
110	94	x	82	66
192	165	x	145	116
231	198	x	174	139
80	68	x	60	48
160	137	x	120	96
x	x	236	x	x
Yes	Yes	No	?	?
Yes	Yes	No	Yes	Yes
Yes	Yes	No	Yes	Yes

DIMENSIONS

Shape	Heigth in mm	Width in mm	Length in mm
Round	180	Ø 180	na
Small	102	102	165
Large	158	127	189

KOLTEC TIP

Choose a battery which fits to the desired life time. The higher the energy content / capacity, the lower the daily usage costs.

CAUTION!! :

Weeds / grass growth against the fence and conductors on the ground have a negative influence on the life time of the battery!

BATTERY LIFE TIME

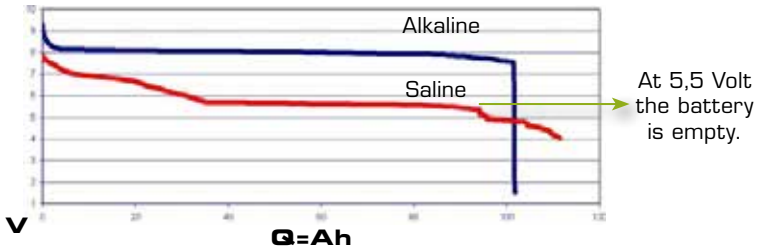
To give a better indication how long a battery works, Koltec changes the capacity indication from Ah into Wh. This stands for Watt hour. This is the energy of the battery, the higher the Wh, the higher the energy content, the longer a fencer works on this battery.

EXAMPLE CALCULATION:

Consumption of the fencer: 30 mA.
Average battery tension (alkaline): 8,5 Volt.
Energy consumption of the device: 30/1000 * 8,5 = 0,255 Wh

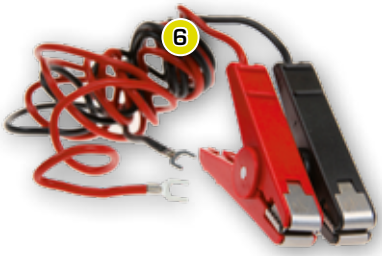
75 Ah Alkaline battery contains 570 Wh.
Usage time of the device with this battery: 570 / 0,255 = 2235 hour = 93 days.

TENSION CURVE OF ALKALINE AGAINST SALINE:



Batteries with the same capacity (100 Ah):

Battery	Weight	Energy (Wh)	Energy eff. Wh/Kg
Alkaline	2,3 kg	800	347
Saline	4,4 kg	600	136



1-2. MOUNTING FRAME EC20/EC25 OR ST
Handy frame in which the fencer is enclosed. The frame also functions as an earthpin. Placing the fencer from one section to another is made very easy by this frame. On higher, dryer sections it is recommended to use also a separate earthpin to optimal functioning of the used fencers.

3. MOUNTING BASE/ FOOT
Handy mounting base or foot for a Koltec battery device. Solid base with which you can move the fencers from one section to an other. The base functions also as earthpin. On higher and dry sections we recommend the use of an extra earthpin.

4. CONNECTION CABLE FOR BATTERIES
Special cable set for the connection of your battery powered fencer with a car/tractor battery. This set protects your fencer against connection failures. The set has also a built-in battery protector against discharge of the battery below the critical level. A dual-led gives the indication that power is supplied and when the tension of the battery becomes critical.

5. BATTERY-LEADS
Handy, but basic connection cable between 12 Volt car/tractor battery and 9-12 Volt energiser.

6. CONNECTION SET
Handy set for the connection between fence energiser, fence and earthpin. Length 150 cm.

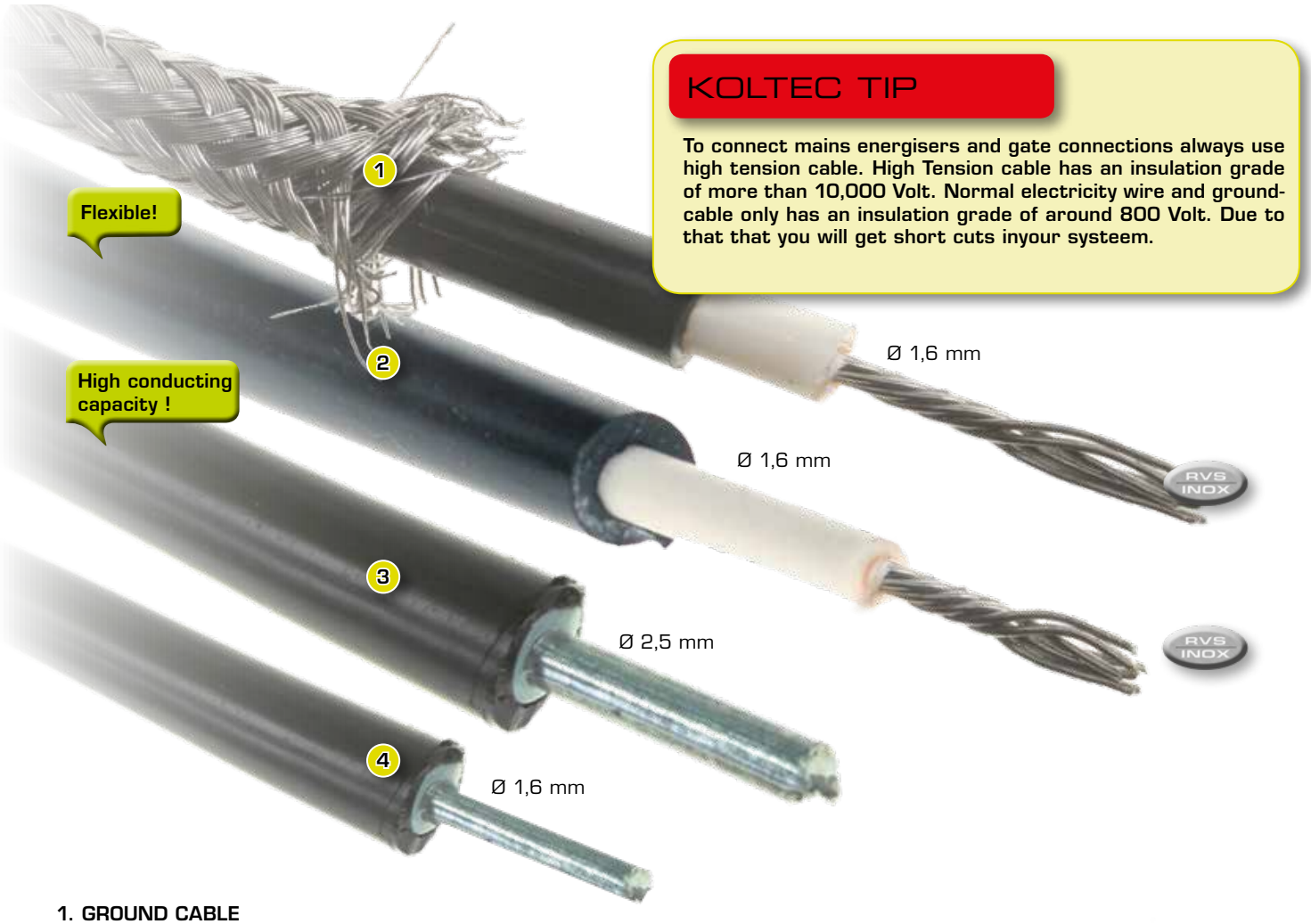
7. 5 WATT SOLAR KIT
Handy kit to turn around your 12 Volt dry battery device into a solar unit. The kit contains a 5 Watt panel, 12 Volt – 12 Ah gel-battery and a connection kit.

8. ELECTRIC FENCE WARNING SIGN
Obligatory with an electric fence at a public road. The sign has to be placed every 50 m.

9. ADAPTER
DC adapter of 9 Volt to connect the EC25 or EB15 to mains.

Photo	Art.nr.	Description	PU	
1	162-85466	Frame for EC-models, with integrated earthing connection	1	
2	162-85465	Frame for ST, with integrated earthing connection	1	
3	152-70301	Mounting base for the EC25, EC20 and HS75	1	
	152-70302	Mounting base for the HB15 and EB15	1	
4	162-60000	Connection kit for wet cell 12 Volt battery, LED indication for charging + battery saver	1	
5	152-80017	Connection kit for 12 Volt batteries	1	
6	162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
7	162-85507	Solar kit 5 Watt for (12 Volt) dry battery powered devices	1	
8	162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	4	
9	135-39995	Adapter DC 9 Volt	1	

PU=Package Unit Price incl. VAT



KOLTEC TIP

To connect mains energisers and gate connections always use high tension cable. High Tension cable has an insulation grade of more than 10,000 Volt. Normal electricity wire and ground-cable only has an insulation grade of around 800 Volt. Due to that that you will get short cuts inyour systeem.

1. GROUND CABLE
High Tension cable with INOX braid.
Connection cable which can be placed underground and is protected against mechanical influences by its INOX braid. The braid can also be used as an earth lead/rod.

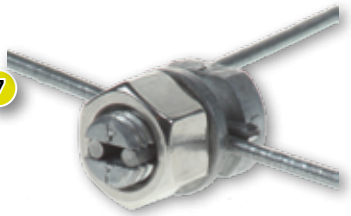
2. HIGH TENSION CABLE
Cable to connect the fence energiser to fences over longer distances. Also extremely suitable to connect earthpins to the fence energiser. Suitable for underground connections, however the cable must be led through a PVC-tube. Double insulated, with 7 strand INOX core of 2 mm^2. Insulation value is 12,000 Volt.

3. STIRDY HIGH TENSION CABLE
HT-cable with a zinc plated, solid core of 2.5 mm. Double insulated with an insulation value of 12,000 Volt.

3. STIRDY HIGH TENSION CABLE
HT-cable with a zinc plated, solid core of 1.6 mm. Double insulated with an insulation value of 12,000 Volt.

Photo	Art.nr.	Description	PU	
1	162-36124-10	Ground cable, HT-cable with INOX braid, 10 mtr	10	
	162-36124-50	Ground cable, HT-cable with INOX braid, 50 mtr	50	
2	133-36122-01	High tension cable per mtr, 7 strand INOX core	1	
	133-36122-10	High tension cable, 7 strand INOX core, coil with 10 mtr	10	
	133-36122-50	High tension cable, 7 strand INOX core, coil with 50 mtr	50	
	133-36122-500	High tension cable, 7 strand INOX core, plastic reel with 500 mtr	500	
3	162-36125-50	High-voltage cable with solid zinc plated 2,5mm core, 50 mtr	50	
	162-36125-100	High-voltage cable with solid zinc plated 2,5mm core, 100 mtr	100	
4	162-36126-25	High-voltage cable with solid zinc plated 1,6mm core, 25 mtr	25	
	162-36126-100	High-voltage cable with solid zinc plated 1,6mm core, 100 mtr	100	
	162-36126-500	High-voltage cable with solid zinc plated 1,6mm core, 500 mtr	500	

PU=Package Unit Price incl. VAT



For the connection of your battery of wet cell battery device you can use for an optimal tension transit one of the underneath connection kits.

1. CONNECTION SET
Set with simple, heart shape connector

2-4. CONNECTION SETS
Handy sets for the connection between fence energiser, fence and earthpin. Length 150 cm.

5. SEPARATE CROCODILE CLIPS
Two red and two black.

For the connection of your mains or wet cell battery energizer with the fence by means of a high-tension cable, you can use underneath connectors.

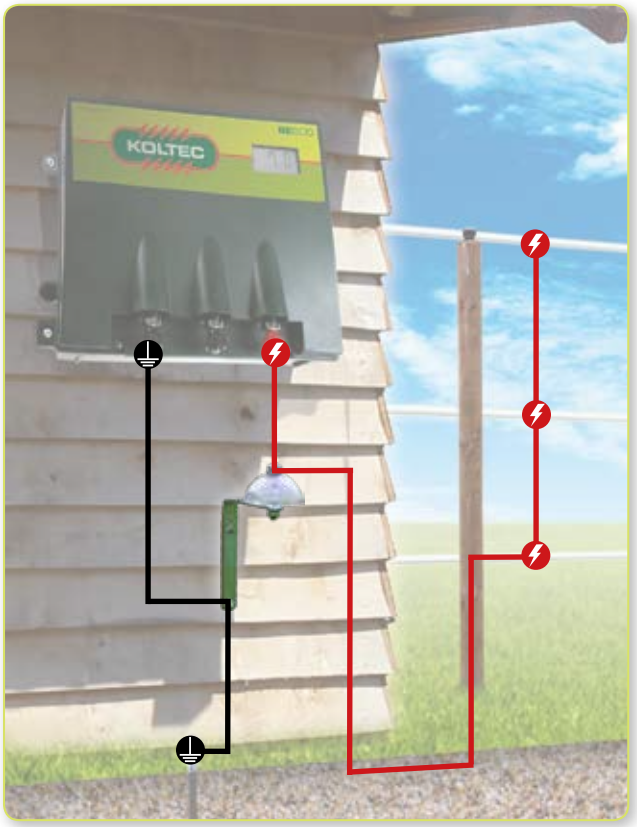
6. TAPE CONNECTION KIT
Separate INOX tape connector plates with connection eye for flexible HT-cable. Cables with a solid core can be connected by twisting an eye and with the ring connecting below the butterfly nut. Per 2 pcs.

7. WIRE CLAMP
Ideal connector for connecting high voltage cable to high tensile wire and making connections between high tensile wires.

8. ROPE CONNECTORS
Handy, good conducting INOX rope connector with butterfly-nuts for easy mounting without wrenches. Per 4 pcs.

Photo	Art.nr.	Description	PU	
1	162-85600	Connection kit with heart shape connector	1	
2	162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
3	162-85607	Connection kit, INOX, for rope, length 150 cm	1	
	162-85609	Connection kit for wire, INOX, length 150 cm	1	
4	162-85606	Connection kit, INOX, for tape, length 150 cm	1	
5	162-85610-4	Clips, crocodile, 2 red + 2 black, synthetic with INOX teeth and spring	4	
6	162-85612-2	Connection kit for tape/HT-cable, with ring and connection eye	2	
7	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
8	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	

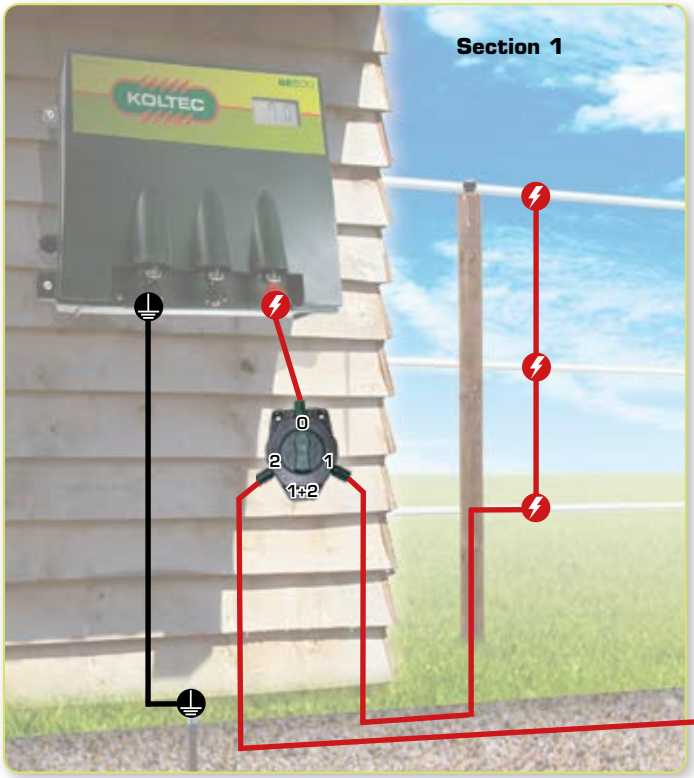
PU=Package Unit Price incl. VAT



1. LIGHTNING DIVERTER
Fence energisers are sensitive for lightning. With the proper prevention measures, the chance of possible damage to the energisers can be reduced.

The KOLTEC lightning diverter offers the necessary protection by diverting the over tension in the air to the ground. With this the chance on a lightning stroke and therefore damage on your energiser will be reduced.

2. SECTION SWITCH
The switch has 4 positions you can choice between.
0 = The tension is not transmitted
1 = Section 1 under tension
2 = Section 2 under tension
1+2 = Section 1 & 2 under tension



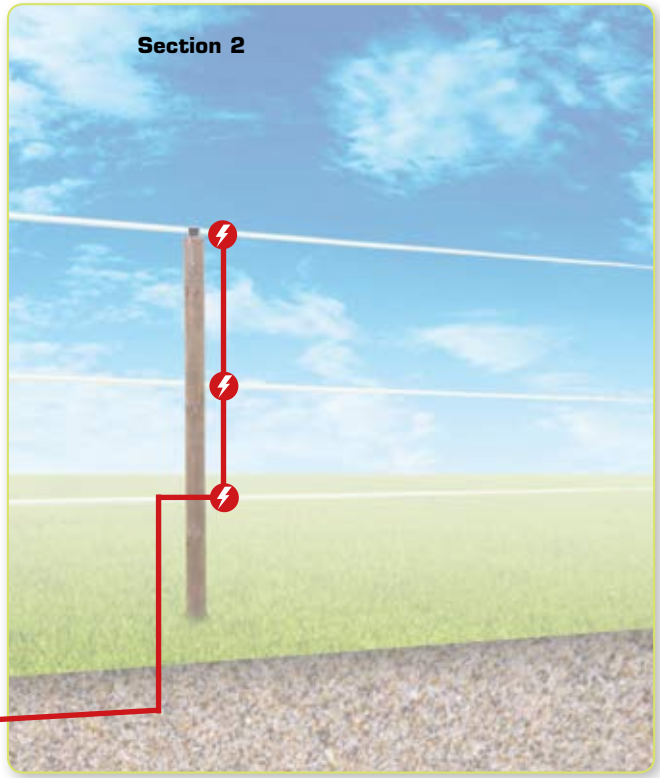


Photo	Art.nr.	Description	PU	
1	162-80175-1	Lightning diverter	1	
2	162-85470	Switch, high voltage, for connecting sections	1	

PU=Package Unit Price incl. VAT

The maximum use of your energiser is only established with sufficient earthing.

The importance of earthing

The earthing takes care of the fact that, when an animal touches the fence, the circuit is being closed and the current is flowing through the animal. This causes an electrical shock to deter the animal.

For an optimal working of the electric fence good earthing is essential. The earthing has to be as such that a very low resistance is present (not higher than 100 Ohm). Optimal is a copper or copper coated earth pin with a diameter of about 20 mm, which is connected to the groundwater level. This however cannot always be realised. In order to get good earthing, we recommend the connection of at least 2 earth pins with a length of 1 meter (code 162-80199, on page 25) parallel and/or in series with each other, with an interval of 3 meters.

When you want to have the maximum use of your electric fencer, then earthing is of crucial importance. Without sufficient earthing the system can never work properly.

TESTING

1 Measure the tension on the earth pin with a voltmeter*.
This measured tension must not be higher than 300 Volt.
The reference for your voltmeter is the earth.

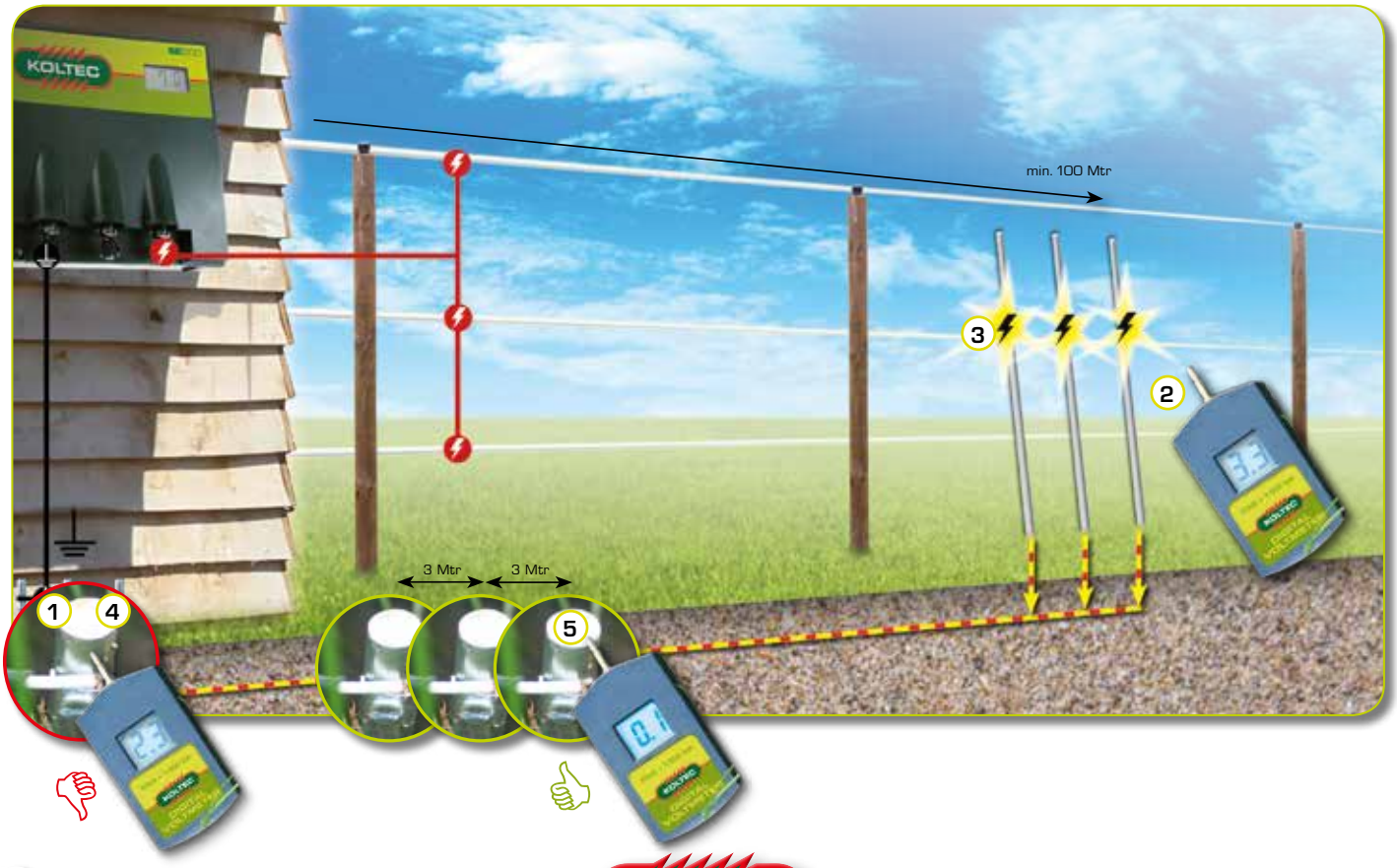
2 Measure with a voltmeter* if, at least 100 meters from the earthing,
if there is more than 3.000 Volt on your fence.
The reference for your voltmeter* is the earth.

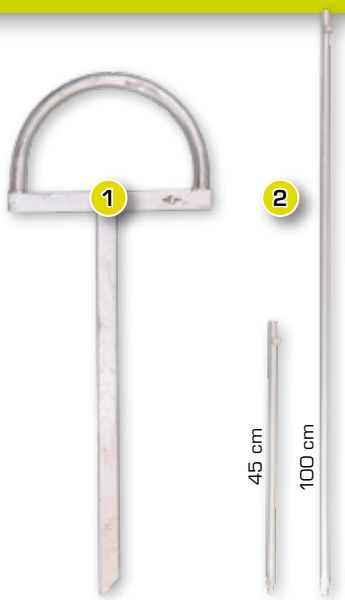
3 Ensure that on this measure point a short circuit is being made by connecting the conductor with the earth, for instance by placing a conducting pole (iron/aluminium) against the wire.

4 Measure the voltage on the earthing in this condition.
Is the voltage more than 300 Volt, then the earthing is insufficient and you have to install more earth pins in order to create an optimal electric fence.

5 After having installed more poles do the above test again.
To make sure the goals above are achieved.

* = High tension voltmeter, see page 97





1. MOBILE EARTH STAKE
Handy earth stake, which is easily pressed into the ground by foot because of the stirrup shape. The round, pipe shaped handle makes it simple to pull the earth stake out of the ground again. Handy to move also the earthing with your mobile installation to a next section. 75 cm long, with T-iron stake for a maximum earthing surface in the ground.

2. EARTH STAKE
Galvanised earth stake, length 45 or 100 cm, connection clamp included.

3. MOUNTING FRAME EC20/EC25
See also page 34

4. MOUNTING FRAME ST
Handy frame in which the energiser is enclosed. The frame also functions as an earth stake.
See also page 34

5. MOUNTING BASE HB15/EB15
Handy mounting base for the HB15/EB15. Solid base with which you can move the fencers from one section to an other. The base functions also as earth stake. On higher, dryer sections it is recommended to use also a separate earth stake for optimal functioning of the used fencers.

6. GROUND CABLE
High-voltage cable with stainless steel braid.
Connection cable which can be placed underground and is protected against mechanical influences by its stainless steel braid. The braid can also be used as an earth lead/rod.

7. HIGH-VOLTAGE CABLE
Cable to connect the fence energiser to fences over longer distances. Also extremely suitable to connect earthpins to the fence energiser. Suitable for underground connections, however the cable must be led through a PVC-tube. Double insulated, with 7 strand stainless steel core of 2 mm^2. Insulation value is 12,000 Volt.

8-9. STIRDY HIGH VOLTAGE CABLE
HV-cable with a zinc plated, solid core of 2.5 mm or 1,6 mm. Double insulated with an insulation value of 12,000 Volt.

Photo	Art.nr.	Description	PU	
1	162-80197	Earth stake, 75 cm, for mobile devices	1	
2	162-80198	Earth stake, short, 45 cm with connector	1	
	162-80199	Earth stake, long, 100 cm with connector	1	
3	162-85466	Frame for EC-models, with integrated earthing connection	1	
4	162-85465	Frame for ST, with integrated earthing connection	1	
5	162-85467	Mounting foot for HB15/EB15, with integrated earthing connection	1	
6	162-36124-10	Ground cable, HT-cable with INOX braid, 10 mtr	10	
	162-36124-50	Ground cable, HT-cable with INOX braid, 50 mtr	50	
7	133-36122-01	High tension cable per mtr, 7 strand INOX core	1	
	133-36122-10	High tension cable, 7 strand INOX core, coil with 10 mtr	10	
	133-36122-50	High tension cable, 7 strand INOX core, coil with 50 mtr	50	
	133-36122-500	High tension cable, 7 strand INOX core, plastic reel with 500 mtr	500	
8	162-36125-50	High-voltage cable with solid zinc plated 2,5mm core, 50 mtr	50	
	162-36125-100	High-voltage cable with solid zinc plated 2,5mm core, 100 mtr	100	
9	162-36126-25	High-voltage cable with solid zinc plated 1,6mm core, 25 mtr	25	
	162-36126-100	High-voltage cable with solid zinc plated 1,6mm core, 100 mtr	100	
	162-36126-500	High-voltage cable with solid zinc plated 1,6mm core, 500 mtr	500	

PU=Package Unit Price incl. VAT

1
POWERGARD XP
KOLTEC
2
Cyclic Series
6
7
8
4
3
9

Crop protection

**Even though electric fence systems are usually meant to keep animals within a certain area, there are also situations conceivable where animals need to be shut out.
For example to protect crops against unwanted wild animals like deer and wild pigs.**

KOLTEC has put together a kit for this situation which ensures you directly of an optimal electric fence.

1. POWERGARD XP
Strong and intelligent

2. TRACTION BATTERY
12 Volt - 110 Ah

3. CARRY CASE
Handy case for a fencer, battery and solar panel

4. POLY WIRE
Blue poly wire, which is very visuable for e.g. wild pigs.

5. POLY POST
Good price - quality balance

6. TENSIONER
Re-inforced, black plastic tensioner.

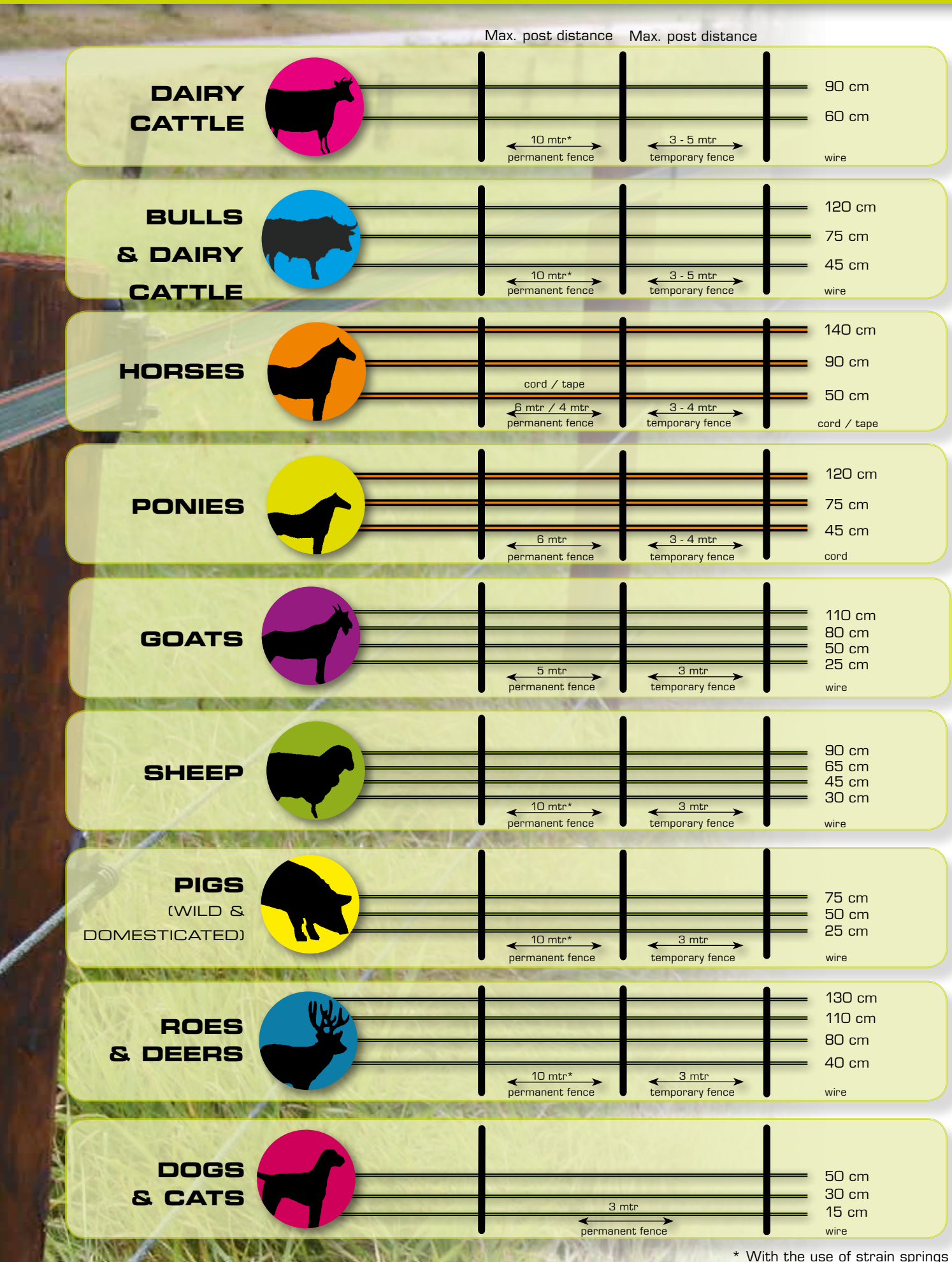
7 - 8. REELS
Stirdy reels with a high capacity.

Photo	Art.nr.	Description	PU	
1	160-81087	Energiser KOLTEC Powergard XP 2,5 J 12 Volt battery device	1	
2	163-45538	Cycle battery 12 Volt - 110 Ah, 275*175*250 mm/32 kg	1	
3	162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	
4	162-39040	Wire, blue 3*0,2niro + 3*0,25Cu 1000 mtr	1000	
5	162-80325	Posts, synthetic, white 105 cm, budget only per 20 price/piece	1	
6	162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
7	162-39029	Reel, large with strap	1	
8	162-39025	Reel, large geared 1:3 for 200 mtr tape/500 mtr polywire	1	
9	162-70509	Strain set with strainer, egg-insulator with galvanized hooks and small spring	1	

EXTREME CIRCUMSTANCES

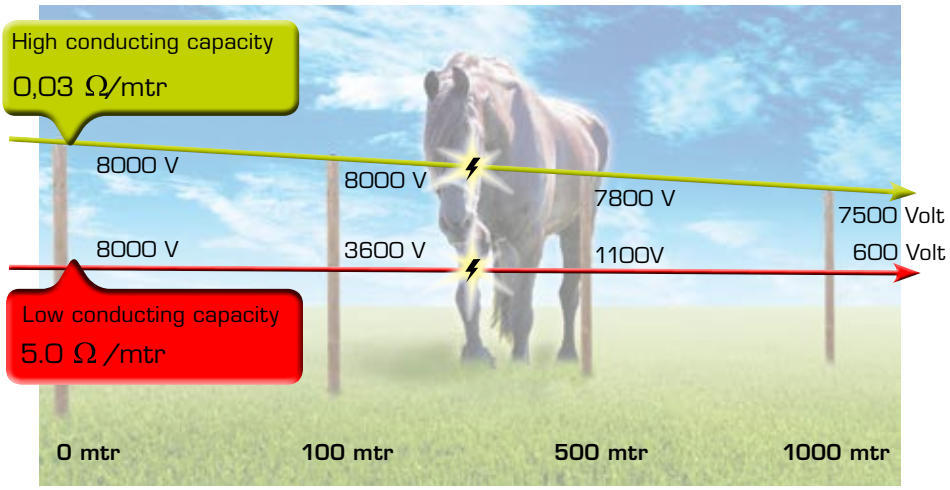
For some considerable time KOLTEC is occupied with the development of electric fences for special projects as Zoo's and Wildlife parks. It is obvious that the requirements here are at a much higher level than for the common farm cattle.
Some animals can be extremely dangerous for people and that requires a well-balanced fence plan. In some other cases the animals are just insensitive for current or very handy in avoiding the electric wires. Per type of animal will therefore always be searched for a suitable made-to measure solution.

CONDUCTOR HEIGHTS



* With the use of strain springs

Example indication of difference in conducting capacity

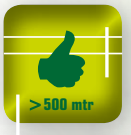


CEE Application length

This is the length of your fence, based on an ideal wire at one meter and at 20 degree celcius, where the tension at the end of the wire is still 1.500 Volt. This length will be shorter with wires on lower heights, vegetation growth and wire with a higher resistance. The length will again be influenced negative by the use of poly wire with a higher resistance.

Compose your own electric fence
www.koltec-electricfencing.com/configurator

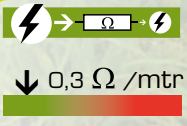
Conductors



Suitable for longer fences

Suitable for fences with a maximum fence length of 200 mtr

Cross, vertical connection that connects the horizontal connectors



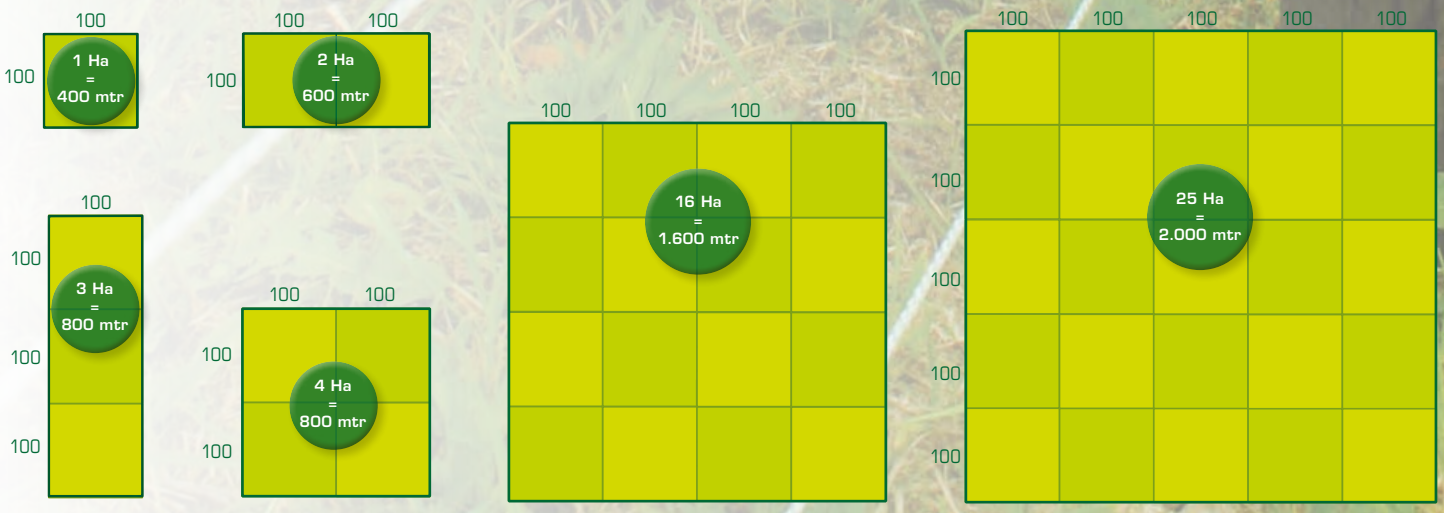
Indication **resistance** in Ohm per (Kilo) Meter. A lower number means less resistance and therefore more current/ volts over a longer distance.
The further the arrow points to red, the higher the resistance of this product.

Number of connectors in or round wire, rope or tape.
More and thicker connectors means a better current transit
The material can exist out of INOX or copper (Cu).

Breaking strength (pull weight) Indication of the breakpoint in Kilogram.

Resistance
The resistance is being measured in Ohm (R). The resistance slows the energy down. R=U/I. No resistance means short circuit, 1.000.000 Ω means a good insulation. An animal or a person has an average resistance of about 500 R. For this reason the power and the impulse energy with this resistance are the relevant values to compare electric fencers. Also conductors like wire, tape and rope have a resistance. The resistance of the various conductors is different. Aluminum wire has a very low resistance and is therefore most suitable for very long fences.

PE:
Conductors constructed with Polyethyleen wires have a long endurance.

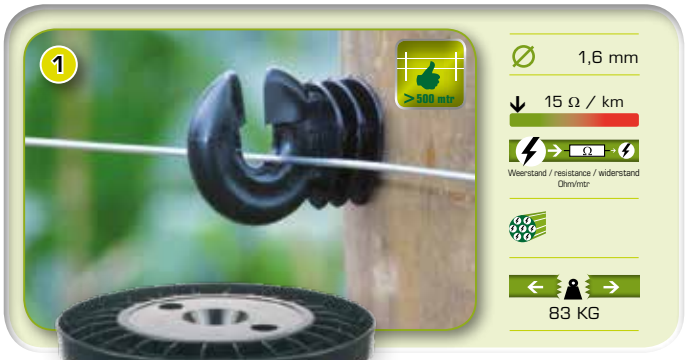


You can find the full range of accessories from page 62 in this catalogue.

Photo	Art.nr.	Description	PU-Mtr	
1	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
2	162-80152-8	Insulation tubes, synthetic with iron inlay, 60 cm long, for max. 3 mm wire	8	
3	162-70505	Strain set, INOX, egg-insulator with hook, spring and ratchet strainer	1	
4	162-70508	Strain set with strainer, egg-insulator with INOX hooks and small spring	1	
5	162-80174-250	Ring insulators with iron core, for wooden posts, bucket 250 pieces	250	
6	162-80085-100	Ring insulators standard, bucket	100	
7	162-80086-200	Ring insulators with iron core, bucket	200	
8	162-80081-100	W-insulators, in bucket, strong insulators for wire and rope	100	
9	162-80146-4	Rotor strainers for wire and rope	4	
	162-80146-50	Rotor strainers for wire and rope, bucket with 50 pcs	50	
10	162-80140	Ratchet strainer, solid for aluminium and steel wire	1	
11	162-80148	Ratchet strainer, solid with integrated insulator, for wire	1	
12	162-80145	Wire strainer, large, galvanized, 13 cm long and 5 cm wide (nr.4)	1	
13	162-80144	Wire strainer, small, galvanized, 10 cm long and 3 cm wide (nr.2)	1	
14	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
15	162-85458	Fencing tool, multifunctional	1	

PU=Package Unit Price incl. VAT

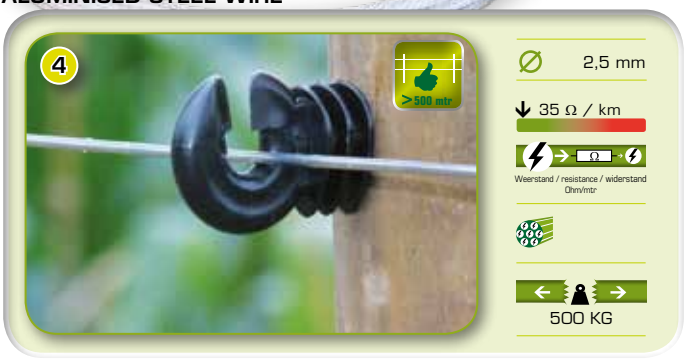
ALUMINUM WIRE



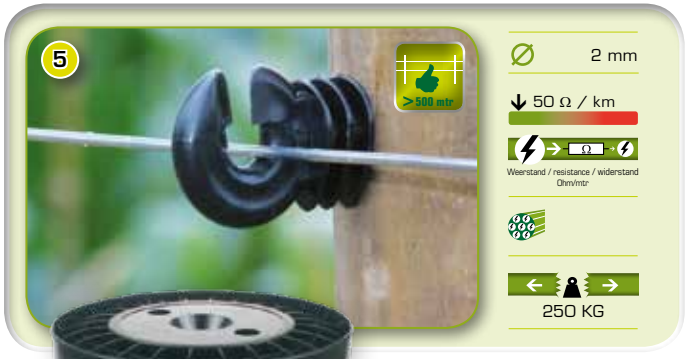
Ø 1,6 mm
Ø 2,0 mm

ALUMINISED STEEL WIRE

ALUMINISED STEEL WIRE



ZINK PLATED WIRE



STRANDED STEEL WIREDRAAD

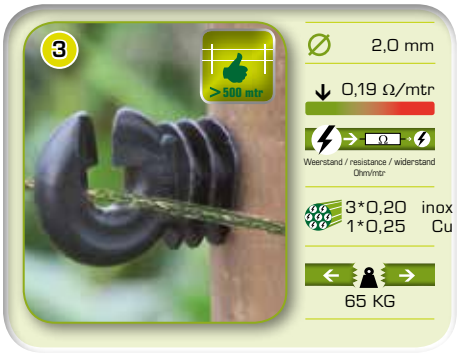
Photo	Art.nr.	Description	PU-Mtr	
1	162-39200	Wire, aluminium, 1,6 mm, 2,4 kg	400	
	162-39205	Wire, aluminium, 1,6 mm, 4,8 kg	800	
2	162-39220	Wire, aluminium, 2,0 mm, 3,6 kg	400	
3	162-39225	Wire, aluminised steel, 1,6 mm 25 kg	1580	
	162-39226	Wire, aluminised steel, 1,6 mm 5 kg	312	
4	162-39221	Wire, aluminised steel, 2,5 mm 25 kg	650	
5	162-39222	Wire, galvanized, 2,0 mm, 10 kg	400	
6	162-39224	Wire, stranded, 19 steel wires, galvanized	400	

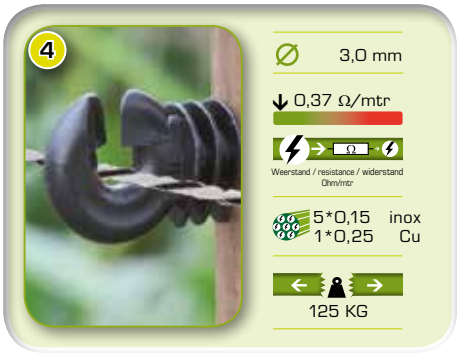
PU=Package Unit Price incl. VAT

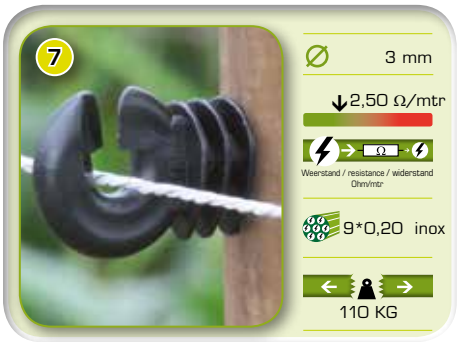
You can find the full range of accessories from page 62 in this catalogue.

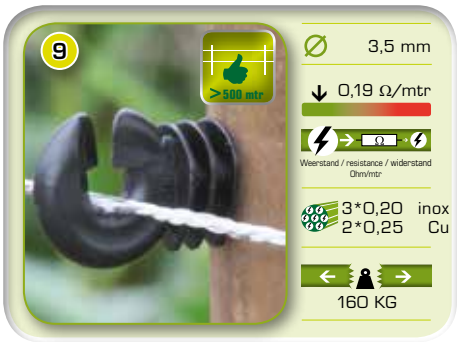
Photo	Art.nr.	Description	PU	
1	162-70500-4	Egg-insulators with 1 hook and screw eye	4	
2	162-80085-25	Ring insulators, standard	25	
3	162-80088-25	Ring insulators, small for wooden constructions	25	
4	162-80081-25	W-insulators for rope max 9 mm	25	
5	162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
6	162-85613-2	Reel cable kit, connecting conductors to main fence	2	
7	162-85605-2	Connection kit, INOX, for wire, with 50 cm long wire	2	
8	162-39091-4	Connectors, single for wire up to 4 mm, galvanized with wing nuts	4	
	162-39093-4	Connectors, single for wire up to 4 mm, INOX, with wing nuts and connection tab	4	
9	162-39096-4	Connectors for wire up to 4 mm, galvanized, with wing nuts	4	
	162-39099-4	Connectors for wire up to 4 mm, INOX, with wing nuts	4	
10	162-80150-2	Strainers, synthetic, green, for wire and tape up to 20 mm	2	
11	162-80150-wit	Strainer reinforced, synthetic, white, for wire	1	
	162-80150-2wt	Strainer reinforced, synthetic, white, for wire, package of 2	2	
12	162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
13	162-80176-2	Wire strainer for thin synthetic wire	2	

PU=Package Unit Price incl. VAT









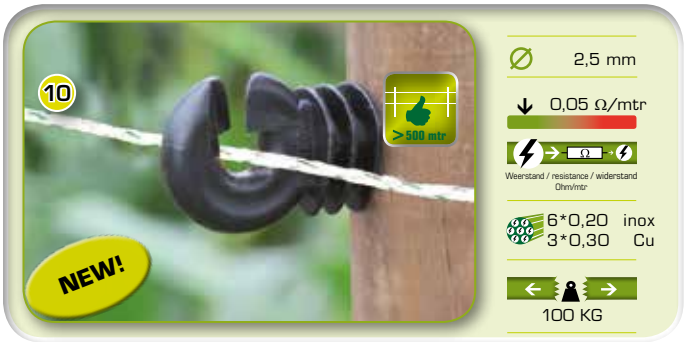


Photo	Art.nr.	Description	PU-Mtr	
1	162-39000	Wire, orange, 12 PE	100	
	162-39020	Wire, orange, 12 PE	250	
2	162-39010	Wire, black, 12 PE	100	
	162-39015	Wire, black, 12 PE	250	
3	162-39023	Wire, green, braided	100	
4	162-39013	Wire black/white, 27 PE	500	
	162-39014	Wire black/white, 27 PE	250	
5	162-39106	Wire, or./yel., 18 PE	250	
	162-39107	Wire, or./yel., 18 PE	500	
6	162-39004	Wire, orange, 24 PE	250	
	162-39005	Wire, orange, 24 PE	500	
7	162-39008	Wire, white, 24 PE	250	
	162-39009	Wire, white, 24 PE	500	

Photo	Art.nr.	Description	PU-Mtr	
	162-39011	Wire, white, 24 PE	1.000	
8	162-39040	Wire, blue 21 PE	1.000	
	162-39041	Wire, blue 21 PE	400	
9	162-39100	Wire poly, white gr/rd, 36 PE	250	
	162-39105	Wire poly, white gr/rd, 36 PE	500	
	162-39104	Wire poly, white gr/rd, 36 PE	1.000	
10	162-39121	Wire, braided wt/gr, 24 PE	200	
	162-39122	Wire, braided wt/gr, 24 PE	500	
	162-39123	Wire, braided wt/gr, 24 PE	1.000	
11	162-39127	Wire, black, 30 PE	200	
	162-39126	Wire, black, 30 PE	500	
	162-39124	Wire, black, 30 PE	1.000	

PU=Package Unit Price incl. VAT

You can find the full range of accessories from page 62 in this catalogue.

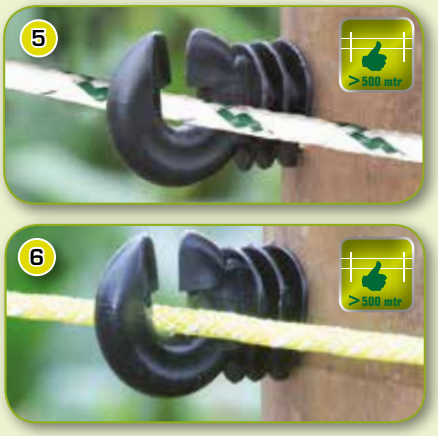
Photo	Art.nr.	Description	PU	
1	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
2	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
3	162-80170-100	Ring insulators KOLTEC, in bucket	100	
4	162-80180-100	W-insulators for rope max 8 mm, in bucket	100	
5	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
6	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
7	162-39097-4	Connectors for rope up to 8 mm, galvanized, with wing nuts	4	
	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
8	162-39092-4	Connectors, single for rope up to 8 mm, galvanized with wing nuts	4	
9	162-39094-4	Connectors, single for rope up to 8 mm, INOX, with wing nuts and connection tab	4	
10	162-80146-4	Rotor strainers for wire and rope	4	
11	162-85607	Connection kit, INOX, for rope, length 150 cm	1	
12	162-85604-2	Connection kit, INOX, for rope, with 50 cm long wire	2	
13	162-85601-2	Connection kit, INOX, tape to rope, with 50 cm long wire	2	

PU=Package Unit Price incl. VAT

PE CONSTRUCTION

Ø 6 mm
0,03 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
6*0,30 inox
3*0,25 Cu
550 KG

SOFT CORE, WITH BRAIDED PE SURFACE



Ø 6 mm
0,13 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
4*0,20 inox
2*0,25 Cu
225 KG

Ø 6 mm
0,08 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
8*0,20 inox
3*0,30 Cu
225 KG

This is a safe rope with a soft contact surface and a breaking strength of only 225 kg. By the construction of a soft core with around it a woven structure of PE-wires this rope will stretch a little if an animal in panic want to flee through it or in the unlikely event get entangled.

SOFT CORE, WITH BRAIDED PE SURFACE

Ø 4 mm
0,13 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
4*0,20 inox
2*0,30 Cu
200 KG

Ø 5 mm
1,90 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
3*0,40 inox
380 KG

Photo	Art.nr.	Description	PU-Mtr	
1	162-39128	Rope, green, PE	200	
	162-39133	Rope, green, PE	500	
2	162-39129	Rope, white, PE	200	
	162-39134	Rope, white, PE	500	
3	162-39131	Rope, black, PE	200	
	162-39132	Rope, black, PE	500	
4	162-39135	Rope, brown, PE	200	
	162-39136	Rope, brown, PE	500	
5	162-39120	Rope, white/gr braided PE	200	

Photo	Art.nr.	Description	PU-Mtr	
5	162-39118	Rope, white/gr braided PE	500	
6	162-39119	Rope, neon braided PE	200	
7	162-39116	Rope brown/rd, braided PE	200	
	162-39117	Rope brown/rd, braided PE	500	
8	162-39114	Rope white/rd, braided PE	200	
	162-39115	Rope white/rd, braided PE	500	
9	162-39110	Rope, white/gr braided PE	200	
10	162-39021	Rope, white gr/rd PP	200	
	162-39022	Rope, white gr/rd PP	500	

PU=Package Unit Price incl. VAT

MOUNTING EXAMPLES

Very solid Start-Corner-Insulator

In-between insulator

Stirdy insulator + 3-Way connection plate

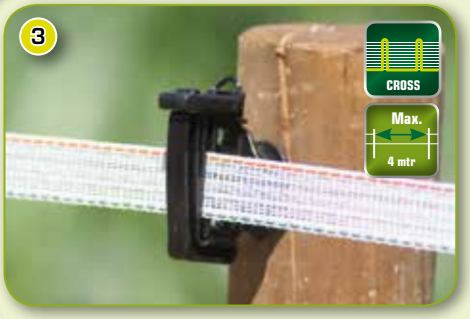
Stirdy insulator + gate handle plate

Gate handle with fix tape connector

Screw aid

20 mm
0,12 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
7*0,20 inox
1*0,15 inox
2*0,25 Cu
245 KG

This tape has a quick transfer of the shock because on the outer edge of the PE reinforced outsides bundles run with 2 INOX wires within turned a thick 0.25 Cu (copper) wire. Once an animal is hanging over the tape or want to graze underneath there is direct contact and the shock is quickly transferred. The applied **cross connection** every 14 cm ensures a long life of the high conductive ability of this tape.



20 mm
3,80 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
6*0,20 inox
1*0,15 inox
120 KG

20 mm
3,80 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
6*0,20 inox
1*0,15 inox
120 KG

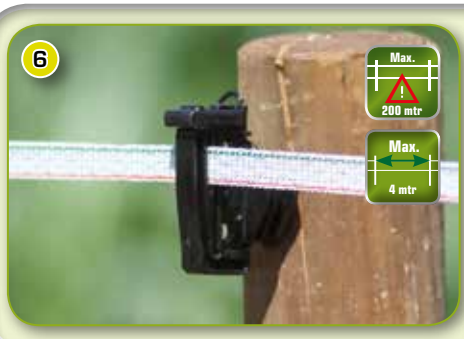
>500 mtr — Suitable for longer fences

Max. 4 mtr

Max. 200 mtr — Suitable for fences with a maximum fence length of 200 mtr

CROSS — Cross, vertical connection that connects the horizontal connectors

20 mm
10,20 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
4*0,16 inox
70 KG



12,5 mm
7,75 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
3*0,20 inox
60 KG

KOLTEC TIP

Use in combination with plastic posts for temporary fences rope or 20 mm tape. Wider tape catches to much wind and that will blow the posts down.

Use by a permanent fence the right insulators with a special 20 mm slit to maximize the period of use.

You can find more information about tape insulators on page 66.

Photo	Art.nr.	Description	PU-Mtr	
1	162-39061	Tape reinforced, white/rd, PE	200	
2	162-39062	Tape reinforced, br./rd, PE	200	
3	162-39072	Tape, white gr/rd, PE	200	
4	162-39059	Tape, green, PE	200	
5	162-39063	Tape, white, PE	200	
6	162-39071	Tape, white gr/rd, PE	200	

PU=Package Unit Price incl. VAT

ACCESSORIES FOR TAPE
40 mm

You can find the full range of accessories from page 66 in this catalogue.

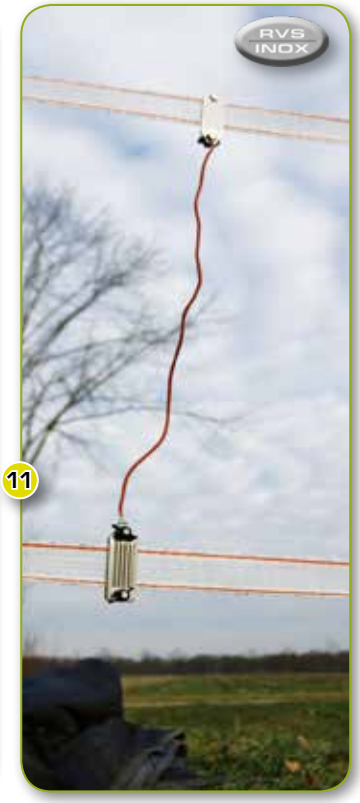


Photo	Art.nr.	Description	PU	
1	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
2	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
3	162-80173-3	Tape strainer, synthetic	3	
4	162-80400-100	Tape insulators KOLTEC, short for wooden posts in bucket	100	
5	162-80142-4	Connectors, INOX, for tape up to 50 mm	4	
6	162-80172-4	Corner insulator for tape, with strain handles, 4 pieces	4	
7	162-80143-2	Gate handle plates, INOX, for connecting tape up to 50 mm to a gate handle	2	
8	162-85612-2	Connection kit for tape/HT-cable, with ring and connection eye	2	
9	162-85606	Connection kit, INOX, for tape, length 150 cm	1	
10	162-85601-2	Connection kit, INOX, tape to rope, with 70 cm long wire	2	
11	162-85603-2	Connection kit, INOX, for tape, with 70 cm long wire	2	

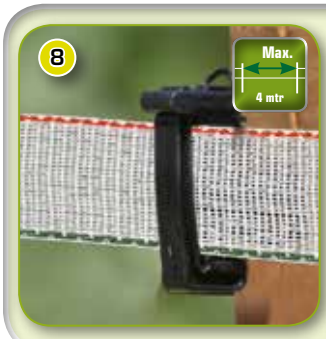
PU=Package Unit Price incl. VAT

40 mm
0,12 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
16*0,20 inox
1*0,15 inox
2*0,30 Cu
345 KG

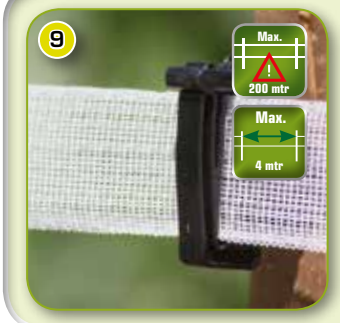
This tape is constrcuted with19 condcutors and has high conducting capacity (low resistance). This tape has a quick transfer of the shock because on the outer edge of the PE reinforced outsides bundles run with 4 INOX wires within turned a thick 0.30 Cu (copper) wire. Once an animal is hanging over the tape or want to graze underneath there is direct contact and the shock is quickly transferred. The applied cross connection every 14 cm ensures a long life of the high conductive ability of this tape.

40 mm
0,07 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
15*0,20 inox
4*0,25 Cu
300 KG

40 mm
1,52 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
15*0,20 inox
300 KG



40 mm
1,66 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
14*0,20 inox
210 KG



40 mm
5,10 Ω/mtr
Weerstand / resistance / widerstand Ohm/mtr
8*0,16 inox
90 KG

>500 mtr Suitable for longer fences

Max. 200 mtr Suitable for fences with a maximum fence length of 200 mtr

Max. 4 mtr

CROSS Cross, vertical connection that connects the horizontal connectors

Photo	Art.nr.	Description	PU	
1	162-39082	Tape reinforced, brown/red, PE	200	
	162-39084	Tape reinforced, brown/red, PE	400	
2	162-39081	Tape reinforced, green/red, PE	200	
	162-39085	Tape reinforced, green/red, PE	400	
3	162-39080	Tape reinforced, white/red,PE	200	
	162-39086	Tape reinforced, white/red,PE	400	
4	162-39083	Tape reinforced, black, PE	200	
	162-39087	Tape reinforced, black, PE	400	
5	162-39078	Tape, white gr/rd, PE	200	
6	162-39066	Tape, white gr/rd, PE	200	
7	162-39077	Tape, brown gr/rd, PE	200	
8	162-39074	Tape, white gr/rd, PE	100	
9	162-39065	Tape, white, PE	200	

PU=Package Unit Price incl. VAT

1

Quick and solid mounting

2

Compose your own electric fence
www.koltec-electricfencing.com/configurator

3

4

5

In 20, 40 of 60 cm
see page 71

6

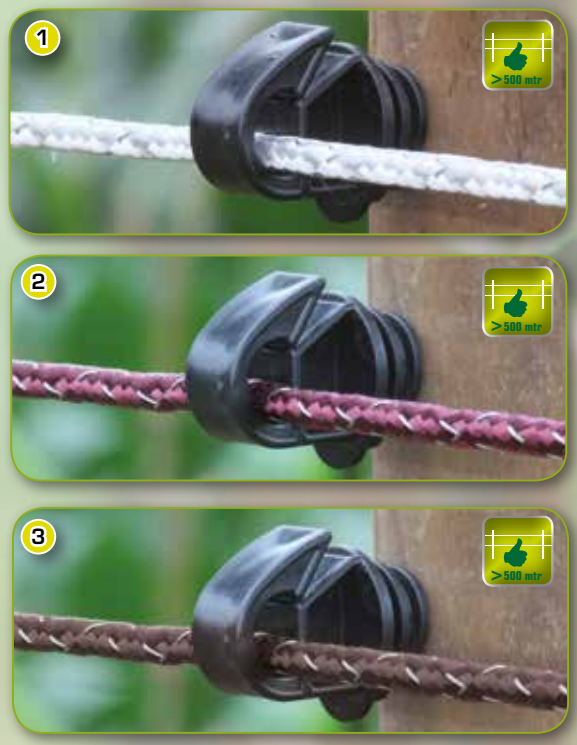
7

Photo	Art.nr.	Description	PU	
1	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
2	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
5	162-39088	Connector for rope up to 10 mm, INOX, with M6 nuts	1	
6	162-80081-100	W-insulators for rope max 9 mm, in bucket	100	
7	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
8	162-80123	Offset pigtail insulator, green, 20 cm 8 mm, for wooden posts	1	
9	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope, in bucket with 50 pcs	50	

PU=Package Unit Price incl. VAT

Hippo Long Life is 8 mm thick and finished on the outside with polyester synthetic material. The inside exists of a pp. fiber which makes the product feels soft. The conductors exist out of 6 thick INOX wires of 0,4 mm and 3 Long Life copper wires of 0,7 mm thick. The copper wires are coated with a plastic, conducting alloy and processed on the inside of the polyester braid, which protects them very well against corrosion and mechanical influences. The INOX wires are processed crosswise and make the contact to the outside.

Because the product is light and flexible, it is easier to install. The polyester outside takes care of a smooth finishing. With the braiding of INOX wires in the casing the contact surface is larger, making the fence more effective. Mounted in a permanent way, the life time is very long. The expected lifetime is more than 10 years.



PP Core + Polyester finishing

Extreme conducting capacity
3x LL 0,7Cu with carbon coating

Secure by 8 mm thick construction with stiff core of PP and around it smooth Polyester.

∅ 8 mm

↓ 0,07 Ω/mtr

Weerstand / resistance / widerstand
Ohm/mtr

6*0,40 inox
3*0,7 LLCu

700 KG

Photo	Art.nr.	Description	PU-Mtr	
1	162-39137	Hippo Long Life, white	300	
2	162-39138	Hippo Long Life, bordeaux	300	
3	162-39139	Hippo Long Life, brown	300	

PU=Package Unit Price incl. VAT

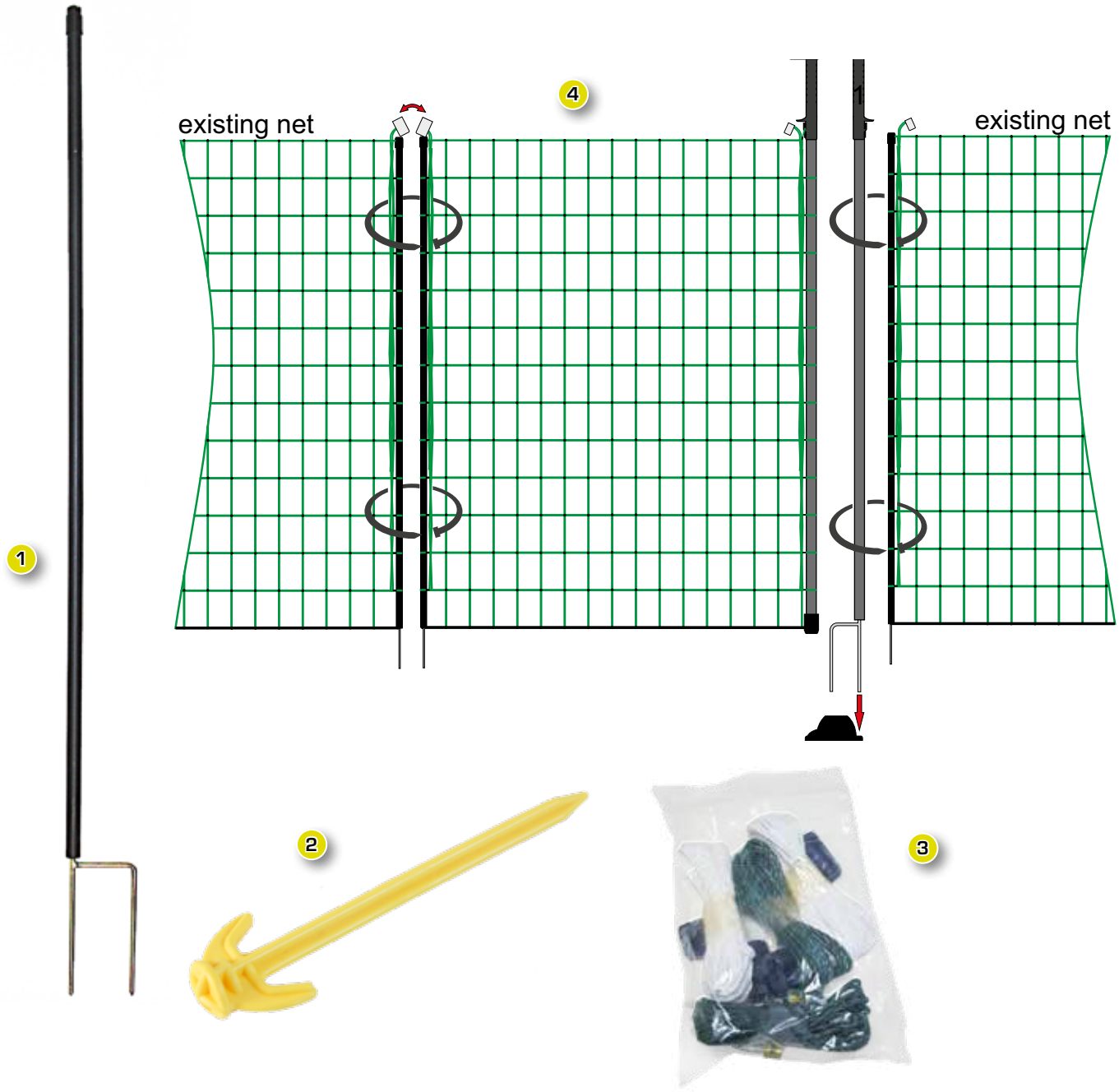
1. Electrified netting for sheep (Green)
Strong sheep net with moulded junctions on 8 horizontal, green strands. The bottom strand is always black and has no conductors. Posts have a single or double spike of 18 cm. The net is 25 or 50 mtr long en 84 cm high. The space between the vertical twines is 16,5 cm.

2. Electrified netting for poultry (Green)
Strong poultry net with moulded junctions on 12 horizontal strands. The net is green and supplied with black posts with a single or double spike of 18 cm. The net is 25 or 50 mtr long and 107 cm or 120 cm high. The space between the vertical twines is 7,6 cm.

3. Electrified netting for rabbits (Green)
Rabbit net with moulded junctions on 7 horizontal strands. Supplied with posts with a single spike of 18 cm. The net is 50 mtr long en 50 cm high. The space between the vertical twines is 7,6 cm.

Photo	Art.nr.	Description	PU	
1	162-50000	Sheep net green 50 mtr long 84 cm high	1	
	162-50000-1	Post extra/exchange for green sheep net	1	
	162-50000-12p	Post, spare, for sheep netting of 120 cm, 2 pins	1	
	162-50000-2p	Sheep net green, 2 pins, 50 mtr long 84 cm high	1	
2	162-50002	Poultry net green 50 mtr long 107 cm high	1	
	162-50002-1	Extra and/or exchange post for green poultry net	1	
	162-50006-2p	Poultry net green, 2 pins, 50 mtr long 120 cm high	1	
	162-50009	Poultry net green 25 mtr long 107 cm high	1	
	162-50011-2p	Poultry net green, 2 pins, 25 mtr long 120 cm high	1	
	162-50011-12p	Post, spare, for poultry netting of 120 cm, 2 pins	1	
	162-50012-2p	Sheep net green, 2 pins, 25 mtr long 84 cm high	1	
3	162-50003	Rabbit net green 50 mtr long 50 cm high	1	
	162-50010	Rabbit net green 25 mtr long 50 cm high	1	
	162-50003-1	Extra and/or exchange post for green rabbit net	1	

PU=Package Unit Price incl. VAT



1. CORNER POST
Special post with double spike for creating strong corners with sheep and poultry netting. 19 mm thick.

3. FIXATION PEG
Additional or replacement

3. REPAIR KIT FOR NETTING
For maintenance and repair of netting. With foot connector, top insulators, wire connectors and single wires.

4. NETTING GATE
Simple to place entrance gate for poultry net.
110 cm or 120 cm high.

Photo	Art.nr.	Description	PU	
1	162-50004	Corner post for sheep netting, double spike, 19 mm thick	1	
	162-50005	Corner post for poultry netting, double spike, 19 mm thick	1	
2	162-50008	Fixation peg	1	
3	162-50015	Repair kit for netting	1	
4	162-50013	Gate kit for poultry netting of 110 cm	1	
	162-50014	Gate kit for poultry netting of 120 cm	1	

PU=Package Unit Price incl. VAT

KOLTEC is also supplier of the TipTop range.
This TipTop range is distributed exclusively in the BeNeLux by KOLTEC.
For more information about this range, please check our webside or contact our sales department.

Royal Lankhorst Euronete GROUP BV

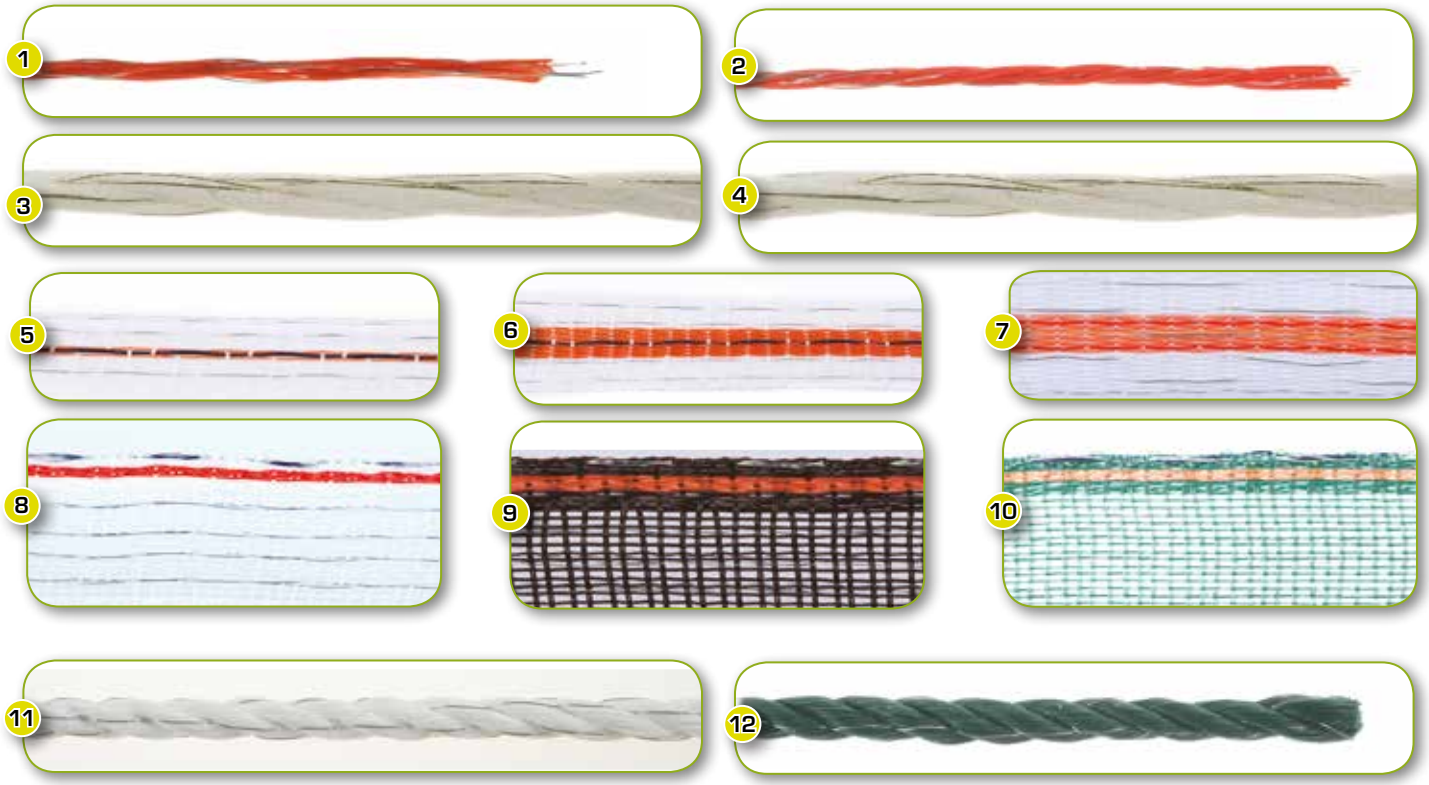


Photo	Art.nr.	Description	PU	
1	162-40000	TipTop wire, orange, 100 mtr 3*4 PE 3*0,2 INOX, breaking strength 55 kg, resistance 8,68 Ohm/mtr	100	
	162-40001	TipTop wire, orange, 250 mtr, 3*4 PE 3*0,2 INOX, breaking strength 55 kg, resistance 8,68 Ohm/mtr	250	
2	162-40002	TipTop wire, orange, 200 mtr, 3*8 PE 3*0,2 INOX, breaking strength 110 kg, resistance 8,68 Ohm/mtr	200	
	162-40003	TipTop wire, orange, 200 mtr, 3*8 PE 6*0,2 INOX, breaking strength 110 kg, resistance 4,41 Ohm/mtr	200	
	162-40004	TipTop wire, orange, 400 mtr, 3*8 PE 6*0,2 INOX, breaking strength 110 kg, resistance 4,41 Ohm/mtr	400	
	162-40029	TipTop wire, orange, 1000 mtr 3*8 PE 6*0,2 mm INOX, breaking strength 110 kg, resistance 4,41 Ohm/mtr	1000	
3	162-40026	TipTop wire, white, 200 mtr, 3*8 PE 9*0,2 INOX , breaking strength 110 kg, resistance 2,94 Ohm/mtr	200	
	162-40027	TipTop wire, white, 400 mtr, 3*8 PE 9*0,2 INOX , breaking strength 110 kg, resistance 2,94 Ohm/mtr	400	
	162-40028	TipTop wire, white, 1000 mtr, 3*8 PE 9*0,2 INOX , breaking strength 110 kg, resistance 2,94 Ohm/mtr	1000	
4	162-40005	TipTop wire, white, 200 mtr, 3*8 PE 6*0,16INOX+3*0,3Cu, breaking strength 120 kg, resistance 0,13 Ohm/mtr	200	
	162-40006	TipTop wire, white, 400 mtr, 3*8 PE 6*0,16INOX+3*0,3Cu, breaking strength 120 kg, resistance 0,13 Ohm/mtr	400	
5	162-40007	TipTop tape, 200 mtr 12,5 mm, PE 5*0,2 INOX, breaking strength 120 kg, resistance 4,74 Ohm/mtr	200	
6	162-40008	TipTop tape, 100 mtr 20 mm, PE 6*0,2INOX, breaking strength 200 kg, resistance 3,95 Ohm/mtr	100	
	162-40009	TipTop tape, 200 mtr 20 mm, PE 6*0,2 INOX, breaking strength 200 kg, resistance 3,95 Ohm/mtr	200	
7	162-40010	TipTop tape, 100 mtr 40 mm, PE 14*0,2 INOX, breaking strength 275 kg, resistance 1,69 Ohm/mtr	100	
	162-40011	TipTop tape, 200 mtr 40 mm, PE 14*0,2 INOX, breaking strength 275 kg, resistance 1,69 Ohm/mtr	200	
8	162-40012	TipTop tape, white, 200 mtr 40 mm, PE 18*0,2 INOX, breaking strength 345 kg, resistance 1,25 Ohm/mtr	200	
9	162-40013	TipTop tape, brown, 200 mtr 40 mm, PE 18*0,2 INOX, breaking strength 345 kg, resistance 1,25 Ohm/mtr	200	
10	162-40014	Tiptop tape, green, 200 mtr 40 mm, PE 18*0,2 INOX, breaking strength 345 kg, resistance 1,25 Ohm/mtr	200	
11	162-40015	TipTop rope, white, 200 mtr 6 mm, PE-mono 6*0.2 INOX, breaking strength 600 kg, resistance 4,41 Ohm/mtr	200	
	162-40019	TipTop rope, white, 500 mtr 6 mm, PE-mono 6*0.2 INOX, breaking strength 600 kg, resistance 4,41 Ohm/mtr	500	
	162-40017	TipTop rope, white, 200 mtr 6 mm, PE-mono 6*0.3 INOX, breaking strength 600 kg, resistance 1,70 Ohm/mtr	200	
12	162-40016	TipTop rope, green, 200 mtr 6 mm, PE-mono 6*0.2 INOX, breaking strength 600 kg, resistance 4,41 Ohm/mtr	200	
	162-40020	TipTop rope, green, 500 mtr 6 mm, PE-mono 6*0.2 INOX, breaking strength 600 kg, resistance 4,41 Ohm/mtr	500	
	162-40018	TipTop rope, green, 200 mtr 6 mm, PE-mono 6*0.3 INOX, breaking strength 600 kg, resistance 1,70 Ohm/mtr	200	

PU=Package Unit Price incl. VAT

1

2

3

4

Photo	Art.nr.	Description	PU	
1	162-40040	TipTop tape Long Life 12,5mm, PE 3*0,2 mm+1*0,16 (cross) INOX+1*0,7Cu, br. strength 120 kg, 0,25 Ohm/m	200	
2	162-40041	TipTop tape Long Life 20 mm, PE 4*0,2 mm+1*0,16 (cross) INOX + 1*0,7Cu, br. strength 180 kg, res. 0,25 Ohm/mtr	200	
3	162-40053	TipTop rope braided, white, 6 mm, PE 4*0,2 mm INOX + 2*0,3 Cu, br.str. 225 kg, resistance 0,12 Ohm/mtr	200	
	162-40054	TipTop rope braided, white, 6 mm, PE 4*0,2 mm INOX + 2*0,3 Cu, br.str. 225 kg, resistance 0,12 Ohm/mtr	500	
4	162-40057	TipTop rope braided, brown, 6 mm, PE 4*0,2 mm INOX + 2*0,3 Cu, br.str. 225 kg, resistance 0,12 Ohm/mtr	200	
	162-40058	TipTop rope braided, brown, 6 mm, PE 4*0,2 mm INOX + 2*0,3 Cu, br.str. 225 kg, resistance 0,12 Ohm/mtr	500	

PU=Package Unit Price incl. VAT

RING INSULATORS
FOR ROPE AND WIRE

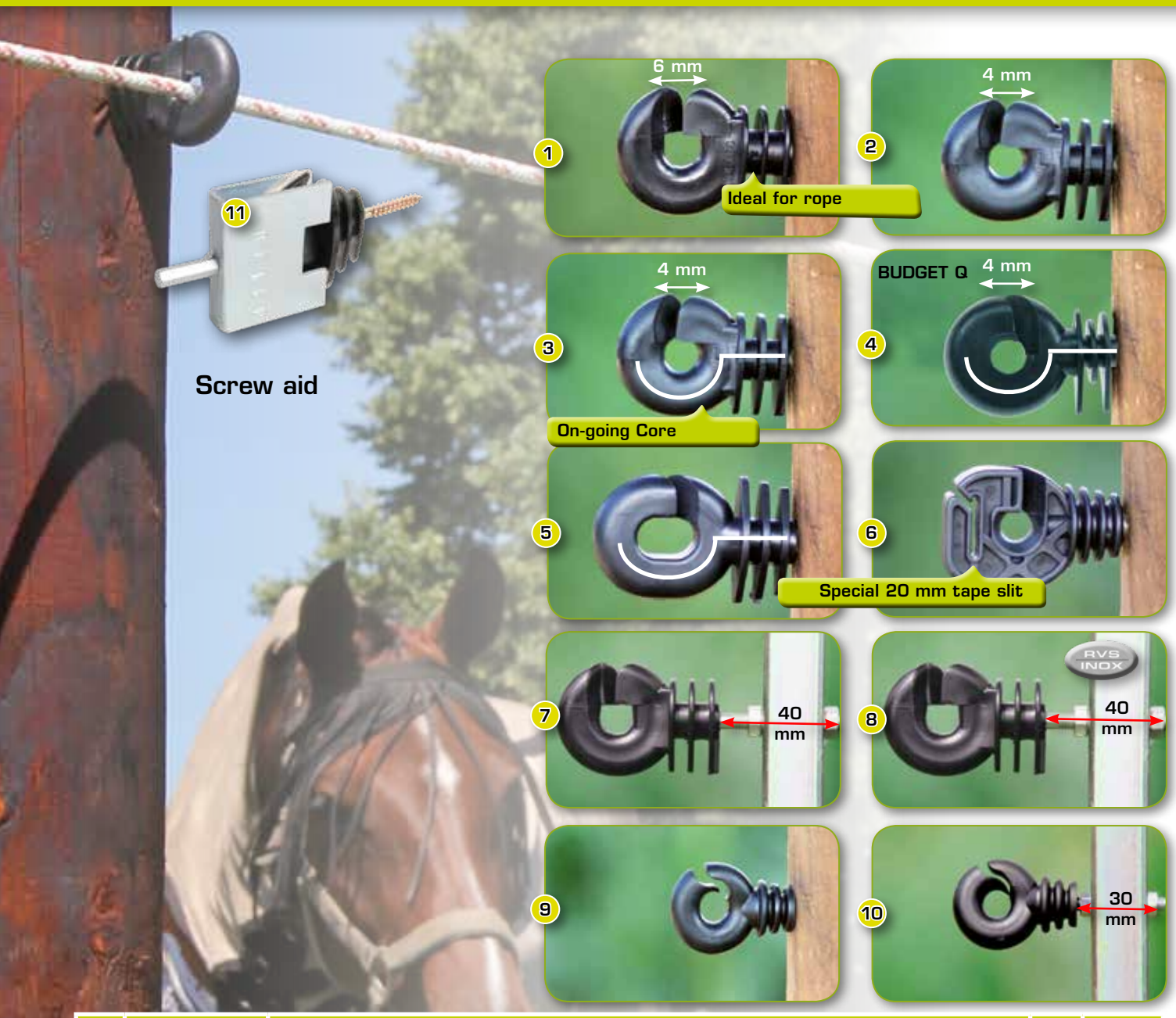
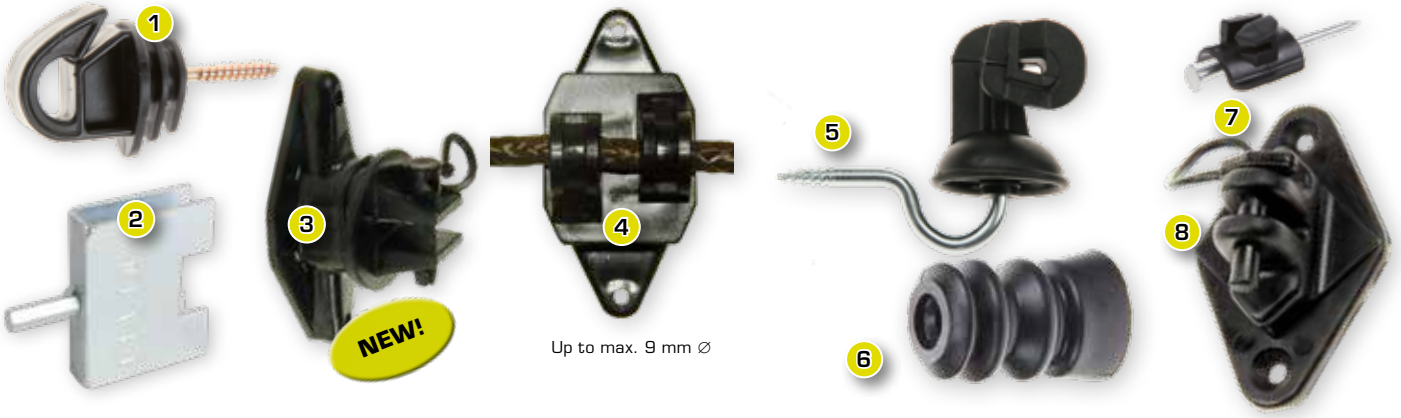


Photo	Art.nr.	Description	PU	
1	162-80170-25	Ring insulators KOLTEC, bag	25	
	162-80170-100	Ring insulators KOLTEC, in bucket	100	
	162-80170-250	Ring insulators KOLTEC, in bucket	250	
2	162-80085-25	Ring insulators, standard	25	
	162-80085-100	Ring insulators standard, bucket	100	
3	162-80086-25	Ring insulators with iron core	25	
	162-80086-100	Ring insulators with iron core, bucket	100	
	162-80086-200	Ring insulators with iron core, bucket	200	
4	162-80174-50	Ring insulators with iron core, for wooden posts 50 pieces	50	
	162-80174-250	Ring insulators with iron core, for wooden posts, bucket 250 pieces	250	
5	162-80096-25	Ring insulators, solid and oval, in bag	25	
	162-80096-100	Ring insulators, solid and oval, in bucket	100	
6	162-80072-25	Ring insulators for rope, can be combined with tape up to 20 mm	25	
7	162-80095-25	Ring insulators with M6 on metal posts, incl. 2 nuts	25	
8	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	
9	162-80088-25	Ring insulators, small for wooden constructions	25	
10	162-80099-25	Ring insulators, small with M5 thread, for metal constructions	25	
11	162-85480	Screw aid KOLTEC, metal, for KOLTEC tape and ring insulators	1	

PU=Package Unit Price incl. VAT



Insulators for stripgrazing posts

Photo	Art.nr.	Description	PU	
1	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
	162-80185-25	Hook-ring insulators, short, for wooden posts	25	
2	162-85472	Screw aid KOLTEC, metal aid for KOLTEC hook-ring insulators	1	
3	162-80166-10	Pin lock insulator, heavy duty 10 pieces	10	
4	162-80081-25	W-insulators for rope max 9 mm	25	
	162-80081-100	W-insulators for rope max 9 mm, in bucket	100	
5	162-80047-25	Rope insulators for wooden posts	25	
6	162-80073-25	Nail insulators KOLTEC	25	
7	162-80043-25	Saddle/nail insulators (small) with nail	25	
8	162-80082-25	Pin lock insulators, for wire and rope	25	
9	162-80061-25	Ring insulators, klemmfix for oval spring steel posts	25	
10	162-80048-25	Insulators for oval posts for tape up to 20 mm	25	
11	162-80015	Side pigtail insulator, for oval spring steel posts	1	
12	162-80206-25	Spring clip, galvanized, for wire/rope on 10 mm posts	25	
13	162-80210-25	Click insulators, black, for wire and tape up to 20 mm on round ø 10 mm posts	25	
14	162-80065-10	Post insulators for wire/rope for posts up to ø 15 mm	10	
	162-80065-100	Post insulators for wire/rope for posts up to ø 15 mm	100	
15	162-80011-10	Post insulators for ø 20 mm posts for wire and rope up to 6 mm	10	
16	162-80038-4	Split insulators for angle iron post	4	
17	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	
	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
	162-80009-25	Click insulators, red, for ø 12 mm posts	25	
	162-80010-25	Click insulators, yellow, for ø 10 mm posts	25	
18	162-80209-25	Ring insulators for post of max. 10 mm	25	

PU=Package Unit Price incl. VAT

Solid and easy installing

Strain, spring and isolation in one. Solid and easy installing, easy to strain afterwards.

1. EGG INSULATOR
The egg-shape insulator is extremely solid and especially suitable for aluminum and (high tensile) steel wire.

2. EGG INSULATOR WITH 1 HOOK
The egg-shape insulator is extremely solid and especially suitable for aluminum and (high tensile) steel wire. With galvanized or INOX hook

3 - 4. EGG INSULATOR WITH 1 HOOK AND SCREW EYE
Designed for end posts- and corners. The egg-shape insulator is extremely solid and especially suitable for aluminum and (high tensile) steel wire. Ideal for fast mounting and a professional finishing look. Hook and screw eye are zinc plated, but also available in INOX. Packed per 4 with connection screw eye.

5. EGG INSULATOR WITH 2 HOOKS
The egg-shape insulator is extremely solid and especially suitable for aluminum and (high tensile) steel wire. With galvanized or INOX hooks

6. SPRING SET
Complete set with egg insulator with hook and spring for a quick and easy mounting of steel-, galvanized- and aluminum wire.

7. SPRING SET WITH INTEGRATED TENSIONER
Complete set with egg insulator with hook, spring and rotor strainer for a quick and easy mounting of steel-, galvanized- and aluminum wire.

8 - 9. SCREW EYE
Large solid screw eye for connecting the egg insulator with hook. Ideal for a quick reliable mounting of corner constructions.

Photo	Art.nr.	Description	PU	
1	162-80077-4	Egg-insulators without hooks in package	4	
	162-80077-100	Egg-insulators without hooks in bucket	100	
2	162-70500	Egg-insulator with 1 hook, single	1	
	162-70504	Egg-insulator with 1 INOX hook, single	1	
3	162-70500-4	Egg-insulators with 1 hook and screw eye	4	
4	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
5	162-70501	Egg-insulator with two hooks, single	1	
	162-70506	Egg-insulator with two INOX hooks, single	1	
6	162-70502	Strain set, egg-insulator with hook and strain spring	1	
	162-70507	Strain set, INOX, egg-insulator with INOX hook and INOX strain spring	1	
7	162-70503	Strain set, egg-insulator with hook, spring and ratchet strainer	1	
	162-70505	Strain set, INOX, egg-insulator with hook, spring and ratchet strainer	1	
8	136-60261	Screw eye	1	
	136-60262	Screw eye, INOX	1	
9	136-60264	Screw eye, INOX, for metal posts, 80 mm M8	1	

PU=Package Unit Price incl. VAT

1. PORCELAIN CORNER INSULATOR
Extremely solid porcelain corner insulator.

2-3. PLASTIC CORNER INSULATOR
Sturdy plastic corner insulator. White or black

4. CORNER ROLL INSULATOR FOR WIRE AND ROPE
Very solid shaped insulator for the conduction of wire and rope through corners. The support is 7 mm thick. For wooden posts.

5. CORNER ROLL INSULATOR FOR WIRE AND ROPE
Very solid shaped insulator for the conduction of wire and rope through corners. The support is 7 mm thick. For metal posts with M6 thread.

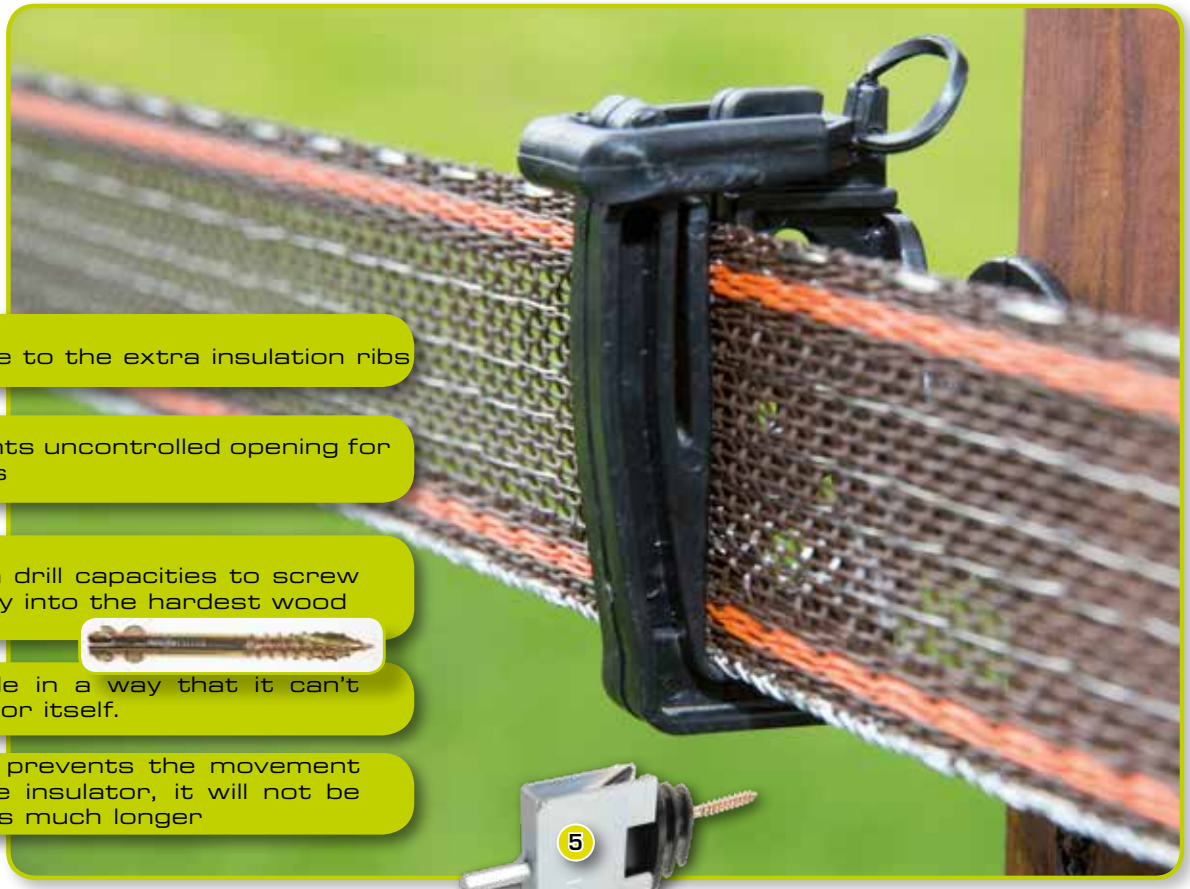
6. CORNER ROLL INSULATOR FOR TAPE AND ROPE
Super tough version of insulator for conduction of tape and cord through corners. The roll has carves for cord and tape from 12, 20 en 40+ mm.
The support is 7 mm thick and suitable for wooden posts. Per 4 pcs.

7. CORNER ROLL INSULATOR FOR WIRE AND ROPE
Very solid shaped insulator with removable roll. Easy to install in new and existing fences.

8. INSULATION TUBE
Plastic tube for aluminum and steel wire up to 3 mm to make a good insulated end or corner connection around a post. For a good conduction and to reinforce the tube, there is an iron strip inside. Per 4 pcs.

Photo	Art.nr.	Description	PU	
1	162-80070-10	Corner insulators of porcelain, for wire and rope	10	
2	162-80071-25	Corner insulators, plastic, for wire and rope	25	
	162-80071-4	Corner insulators, white plastic, for wire and rope	4	
3	162-80119-25	Corner insulators, black plastic, for wire and rope	25	
	162-80119-4	Corner insulators, black plastic, for wire and rope	4	
4	162-80075-4	Corner roll insulators for wire and rope for wooden posts	4	
5	162-80012-4	Corner roll insulators for rope and wire for metal posts with M6 thread incl. 2 nuts	4	
6	162-80074-4	Corner roll insulators for rope and tape for wooden posts	4	
7	162-80171-3	Corner roller, synthetic for wire	3	
8	162-80152-8	Insulation tubes, synthetic with iron inlay, 60 cm long, for max. 3 mm wire	8	

PU=Package Unit Price incl. VAT



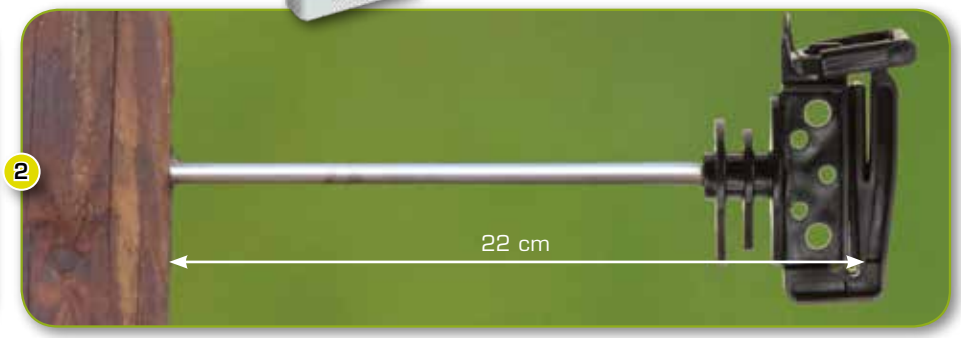
High insulation due to the extra insulation ribs

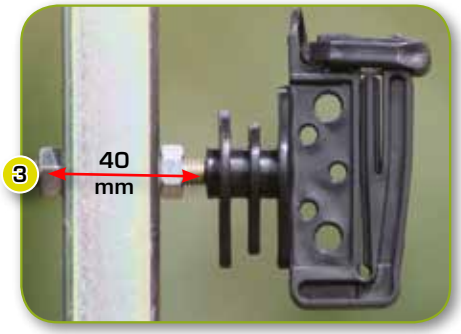
Closing clip prevents uncontrolled opening for example by squalls

Wood thread with drill capacities to screw the insulator easily into the hardest wood

The shaft is made in a way that it can't turn in the insulator itself.

The construction prevents the movement of the tape in the insulator, it will not be damaged and lasts much longer





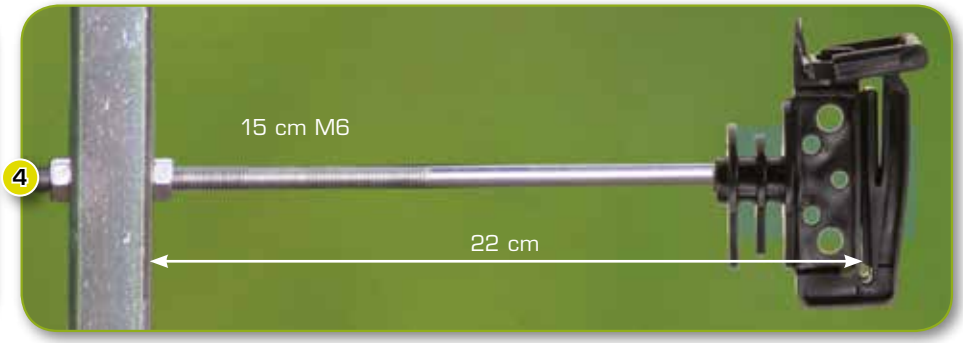


Photo	Art.nr.	Description	PU	
1	162-80400-25	Tape insulators KOLTEC, for wooden posts per bag	25	
	162-80400-100	Tape insulators KOLTEC, for wooden posts in bucket	100	
2	162-80401-10	Offset tape insulator KOLTEC, for wooden posts	10	
3	162-80402-25	Tape insulators KOLTEC, with complete M6 thread shaft, for metal posts	25	
4	162-80403-10	Offset tape insulator KOLTEC, with M6 thread incl. nuts for metal posts	10	
5	162-85480	Screw aid KOLTEC, metal aid for KOLTEC tape- and ring insulators	1	

PU=Package Unit Price incl. VAT

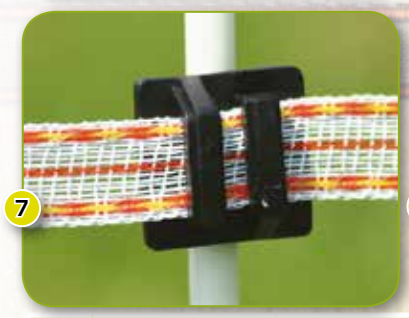


Photo	Art.nr.	Description	PU	
1	162-80100-25	Insulators KOLTEC for tape up to 40 mm	25	
	162-80100-100	Insulators KOLTEC for tape up to 40 mm, in bucket	100	
2	162-80059-25	Insulators for tape up to 40 mm, with combination options for wire and rope up to 6 mm	25	
	162-80059-100	Insulators for tape up to 40 mm, with combination options for wire and rope up to 6 mm	100	
3	162-80060-25	Insulators sturdy and large for tape up to 40 mm and rope up to 6 mm	25	
4	162-80072-25	Ring insulators for rope, can be combined with tape up to 20 mm	25	
5	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
6	162-80048-25	Insulators for oval posts for tape up to 20 mm	25	
7	162-80210-25	Click insulators, black, for wire and tape up to 20 mm on round ø 10 mm posts	25	
8	162-80066-10	Post insulators for tape up to 40 mm for round post up to ø 15 mm	10	
	162-80066-100	Post insulators for tape up to 40 mm for round post up to ø 15 mm	100	

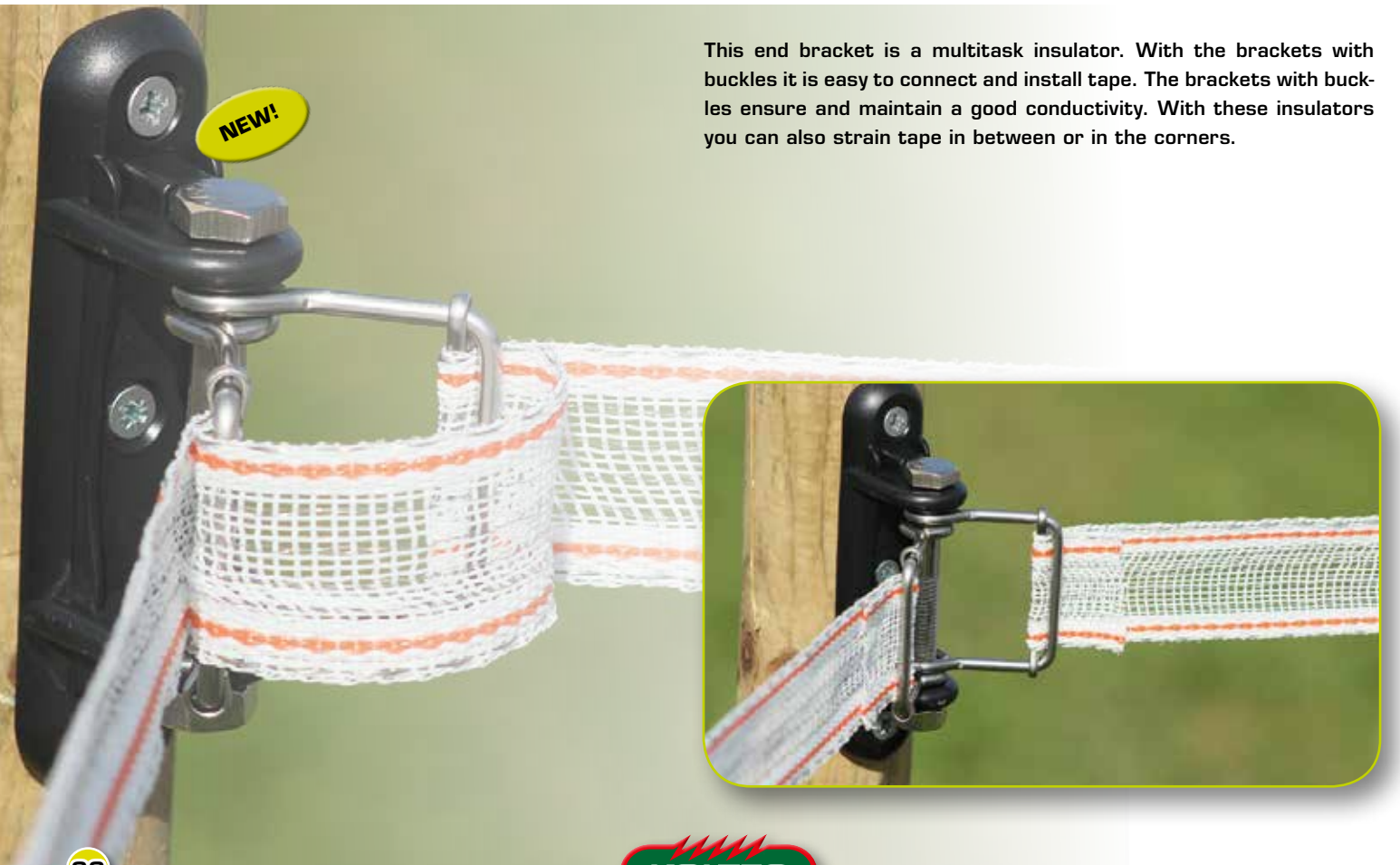
PU=Package Unit Price incl. VAT

KOLTEC TIP

Use this insulator in corners and every 50 à 60 mtr as an in-between insulator. In this way it is easy to built a tight strained tape fence and to keep it strained.

Very solid corner insulator for strong corner connections. With the stainless steel joiner plate and this insulator it is easy to make in-between connections when laying out in-between pastures.

The joiner plate also takes care off an optimal contact surface and for a perfect connection of the tape at the junctions. The teeth on the inside of the insulator, provides that the tape is fixated in a very solid way.



This end bracket is a multitask insulator. With the brackets with buckles it is easy to connect and install tape. The brackets with buckles ensure and maintain a good conductivity. With these insulators you can also strain tape in between or in the corners.

1. SOLID TAPE INSULATOR
Very solid tape insulator for straining tape in between and to build sections.

2. SOLID TAPE INSULATOR WITH INOX PLATE
Very solid insulators with INOX tape connector for the connection of tape, laying out a three-way crossing for fencing in-between pastures and as gate handle anchor/en insulator.

3. INOX CONNECTION PLATE
Single INOX plate for the solid tape insulator

4. CORNER INSULATOR
Corner/start/in-between insulator for tightening tape. The rubber inner piece conducts the tension over the full width of the tape. Packed per 4 pcs.

5. CORNER/START INSULATOR FOR TAPE.
Heavy duty insulator with 2 metal brackets to allow easy tightening of the tape or conduction through the corner.

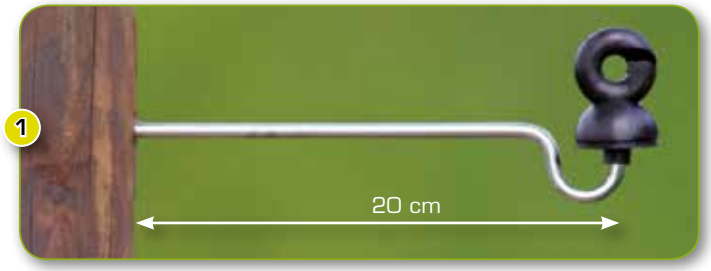
6. CORNER/START INSULATOR FOR TAPE.
Heavy duty insulator with 2 stainless steel brackets with buckles to allow easy tightening of the tape and the possibility to strain the tape.

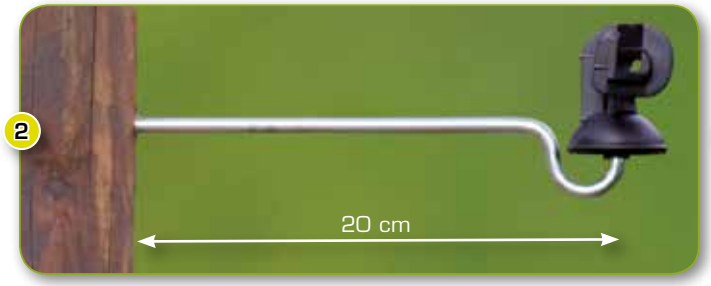
7. CORNER ROLL INSULATOR FOR TAPE AND ROPE
Super tough version of insulator for conduction of tape and cord through corners. The roll has carves for cord and tape from 12, 20 en 40+ mm. The support is 7 mm thick and suitable for wooden posts. Per 4 pcs.

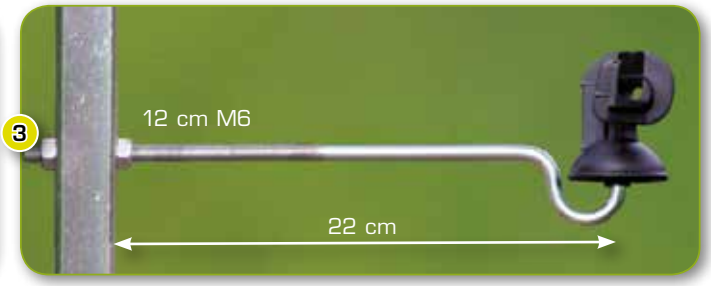
Photo	Art.nr.	Description	PU	
1	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
2	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
3	137-80069	Connection plate, INOX, for insulator 162-80068-4	1	
4	162-80046-4	In-between/corner insulators with rubber inlay to fixate tape	4	
5	162-80120-4	Corner/start insulators for tape, with metal brackets for max. contact	4	
6	162-80172-4	Corner insulator for tape, with strain handles, 4 pieces	4	
7	162-80074-4	Corner roll insulators for rope and tape for wooden posts	4	

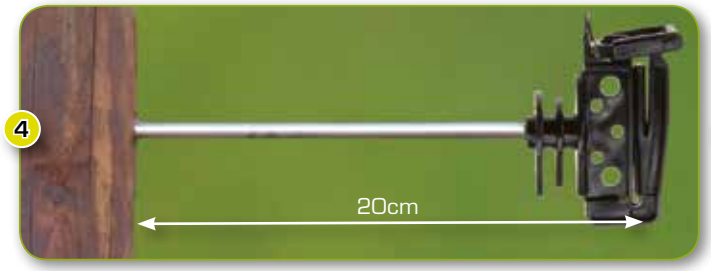
PU=Package Unit Price incl. VAT

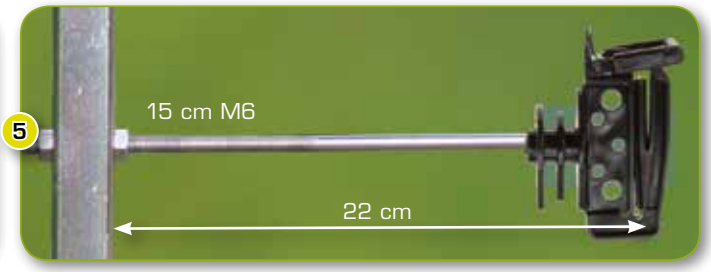
OFFSET INSULATORS

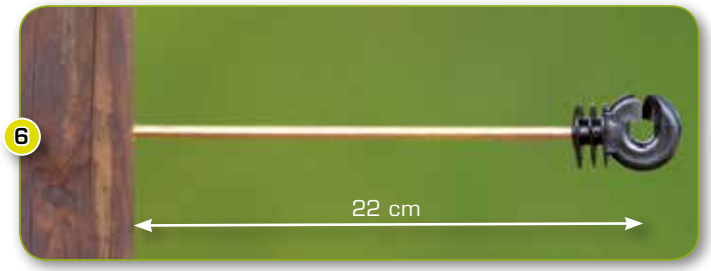


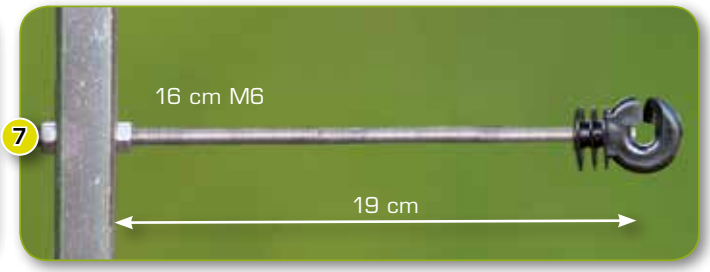


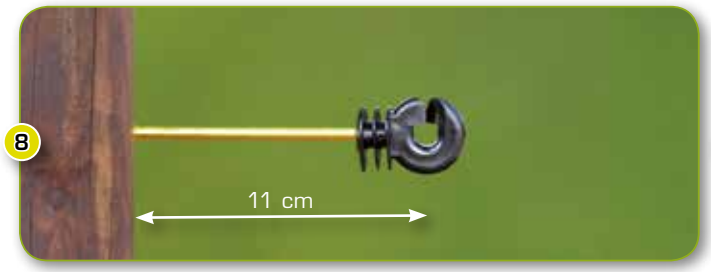












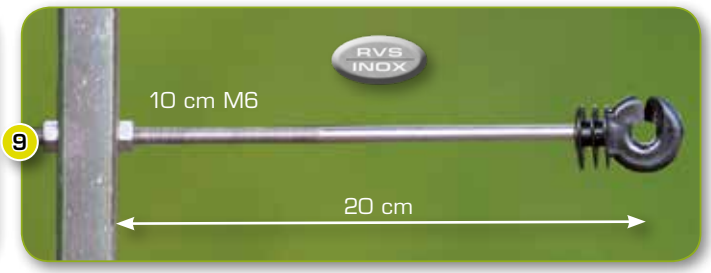
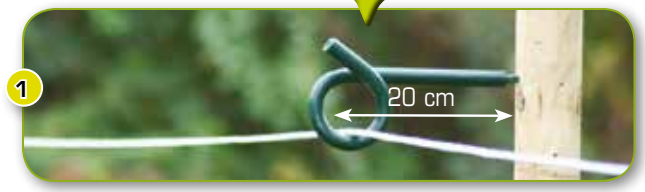
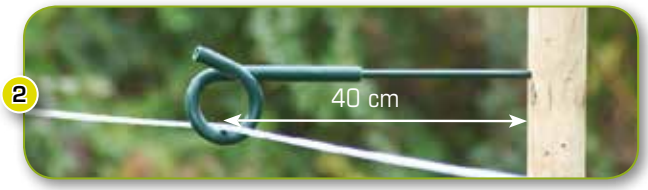


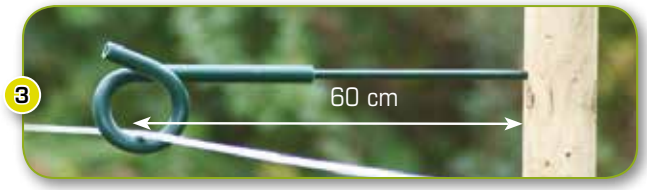
Photo	Art.nr.	Description	PU	
1	162-80087-10	Offset ring insulators for wire on wooden posts	10	
2	162-80094-10	Offset ring insulators for rope up to 8 mm, on wooden posts	10	
3	162-80098-10	Offset insulators with M6, for rope up to 8 mm on metal posts	10	
4	162-80401-10	Offset tape insulator KOLTEC, for wooden posts	10	
5	162-80403-10	Offset tape insulator KOLTEC, with M6 thread incl. nuts for metal posts	10	
6	162-80503-10	Offset ring insulators, for wire/rope on wooden posts	10	
7	162-80093-10	Offset ring insulators for wire with M6 on metal posts	10	
8	162-80505-20	Ring insulators special, half long, for wooden posts	20	
	162-80505-100	Ring insulators special, half long, for wooden posts	100	
9	162-80507-10	Offset ring insulators, INOX, with M6 thread for wire/rope on metal posts	10	

PU=Package Unit Price incl. VAT

Available in 20, 40 and 60 cm

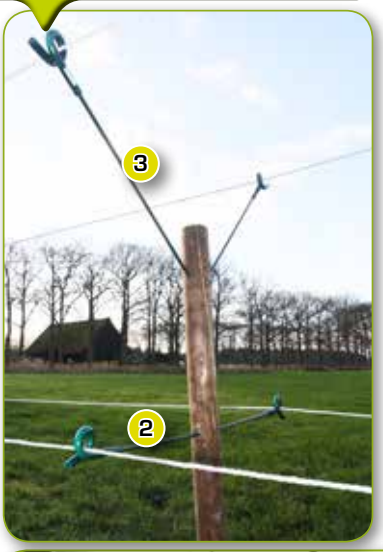




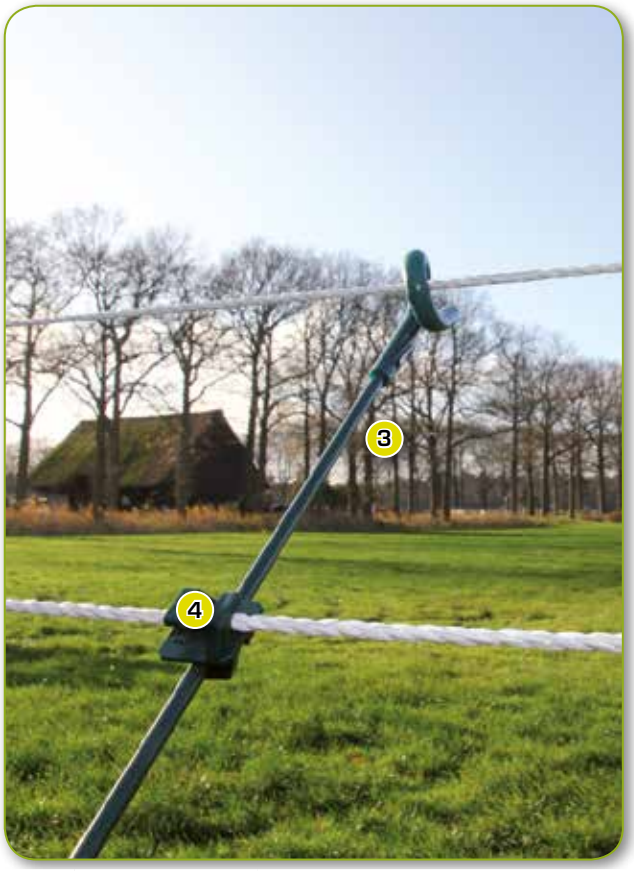


8 mm thick and green powder coated

Create quick and easy 1,20 meter between 2 pastures!



Gate bracket 45° slanting or 90° angle mounting



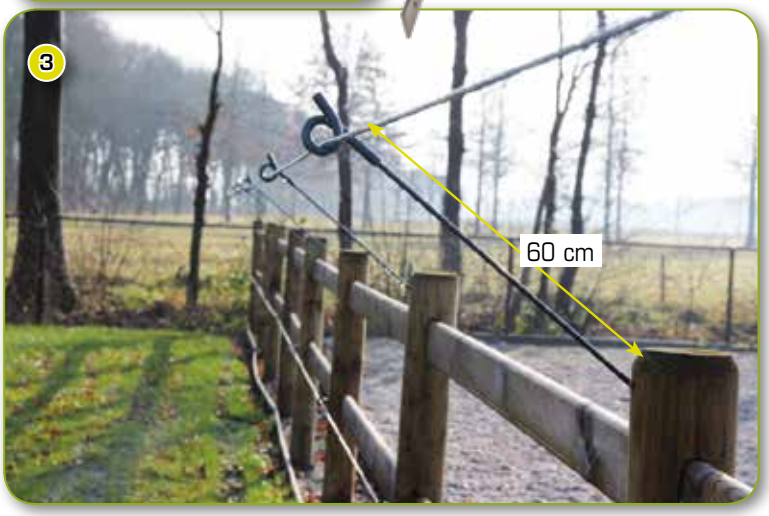
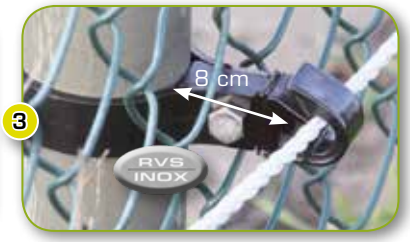


Photo	Art.nr.	Description	PU	
1	162-80123	Offset pigtail insulator, green, 20 cm 8 mm, for wooden posts	1	
		Offset pigtail insulators, green, 20 cm 8 mm, for wooden posts per 50 price/piece	1	
2	162-80113	Offset pigtail insulator, green, 40 cm 8 mm, for wooden posts	1	
		Offset pigtail insulator, green, 40 cm 8 mm, for wooden posts per 50 price/piece	1	
3	162-80126	Offset pigtail insulator, green, 60 cm 8 mm, for wooden posts	1	
		Offset pigtail insulator, green, 60 cm 8 mm, for wooden posts per 50 price/piece	1	
4	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
5	136-80130	End brackets 45° INOX 60 cm	1	
6	136-80131	End bracket 90° INOX 40 cm	1	
	136-80133	End bracket 90° INOX 60 cm	1	

PU=Package Unit Price incl. VAT

1

2



3

4

PLASTIC INSULATORS
Plastic insulators which take care that animals don't spoil your nice gauze fence. These insulators are suitable for e.g. Bekaert fences, with posts with a diameter of 48 mm or 60 mm. There are also insulators for posts with a dimension of 40*60 mm. The short variety has a distance to the post of 8 cm, the offset insulators 25 cm.

5

6

7

8

9

Photo	Art.nr.	Description	PU	
1	162-80055	Offset insulator 25 cm for tape on round posts Ø 48 mm	1	
	162-80056	Offset insulator 25 cm for tape on round posts Ø 60 mm	1	
2	162-80132	Insulator, synthetic for tape, for round ø 48 mm posts	1	
	162-80133	Insulator, synthetic for tape, for round ø 60 mm posts	1	
3	162-80130	Insulator, synthetic for wire/rope, for round ø 48 mm posts	1	
	162-80131	Insulator, synthetic for wire/rope, for round ø 60 mm posts	1	
4	162-80089	Offset insulator 25 cm for rope/wire, for round posts of ø 48 mm	1	
	162-80090	Offset insulator 25cm for rope/wire on round posts Ø 60 mm	1	
5	162-80134	Insulator, synthetic for wire/rope, for posts of 60*40 mm	1	
6	162-80135	Offset insulator, synthetic for wire/rope, for posts of 60*40 mm	1	
7	162-80136	Insulator, synthetic for tape, for posts of 60*40 mm	1	
8	162-80137	Offset insulator, synthetic for tape, for posts of 60*40 mm	1	
9	162-80161	Fencerail clamp top insulator for 6 mm	1	
	162-80162	Fencerail clamp top insulator for 8 mm	1	

PU=Package Unit Price incl. VAT

Divers utilization possibilities

1. TRELLIS BAR TERMINAL INSULATOR
To use on bars of trellis fences.
10 cm long, suitable for bars of 5 - 6 mm.

2. PLASTIC OFFSET INSULATOR
For use on gauze fences. Length 30 cm.

3. INOX POST BRACKET
For posts of 30-60 mm. INOX bracket, with rubber inlay for damageless mounting to posts. All insulators with M8 and M6 thread fit to this bracket.

4. BRACKET KIT
By fences which are build up with posts of 60*40 mm, there are often gate doors used with poles of 40*40 mm. This kit is suitable for this kind of gate doors to build up an electric circuit on the gate door in combination with the INOX ring insulators.

5. RING INSULATOR
(Short). For metal posts (M6), can be combined with bracket 162-80097. (per 25 pcs.) The complete INOX shaft is made with M6 thread, delivered with two INOX nuts.

6. OFFSET RING INSULATOR FOR WIRE
For metal posts. (per 10 pcs.) INOX shaft with M6 thread, including 2 INOX nuts. This insulator can also be combined with the INOX bracket for round posts, code 162-80097.

7. CORNER ROLL INSULATOR FOR WIRE + ROPE
Very solid shaped insulator for the conduction of wire and rope through corners. The support is 7 mm thick. For metal posts with M6 thread.

8. CORNER INSULATOR KIT
Egg-insulator mith INOX hook and INOX screw eye with M8 + nuts.

Photo	Art.nr.	Description	PU	
1	162-80067	Fencerail clamp insulator	1	
2	162-80018	Offset insulator, plastic, 30 cm, for wire and rope, for gauze fences	1	
3	162-80097	Bracket, INOX, for post 30-60 mm, with M6 and M8 thread	1	
4	162-80138-4	Post terminals, synthetic with INOX bracket and nut, for 40*40 mm posts	4	
	162-80139-4	Post terminals, synthetic with INOX bracket and nut, for 60*60 mm posts	4	
5	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	
6	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
7	162-80012-4	Corner roll insulators for rope and wire for metal posts with M6 thread incl. 2 nuts	4	
8	162-70510-4	Egg-insulators with INOX hook and screw eye M8 (80 mm)	4	

PU=Package Unit Price incl. VAT

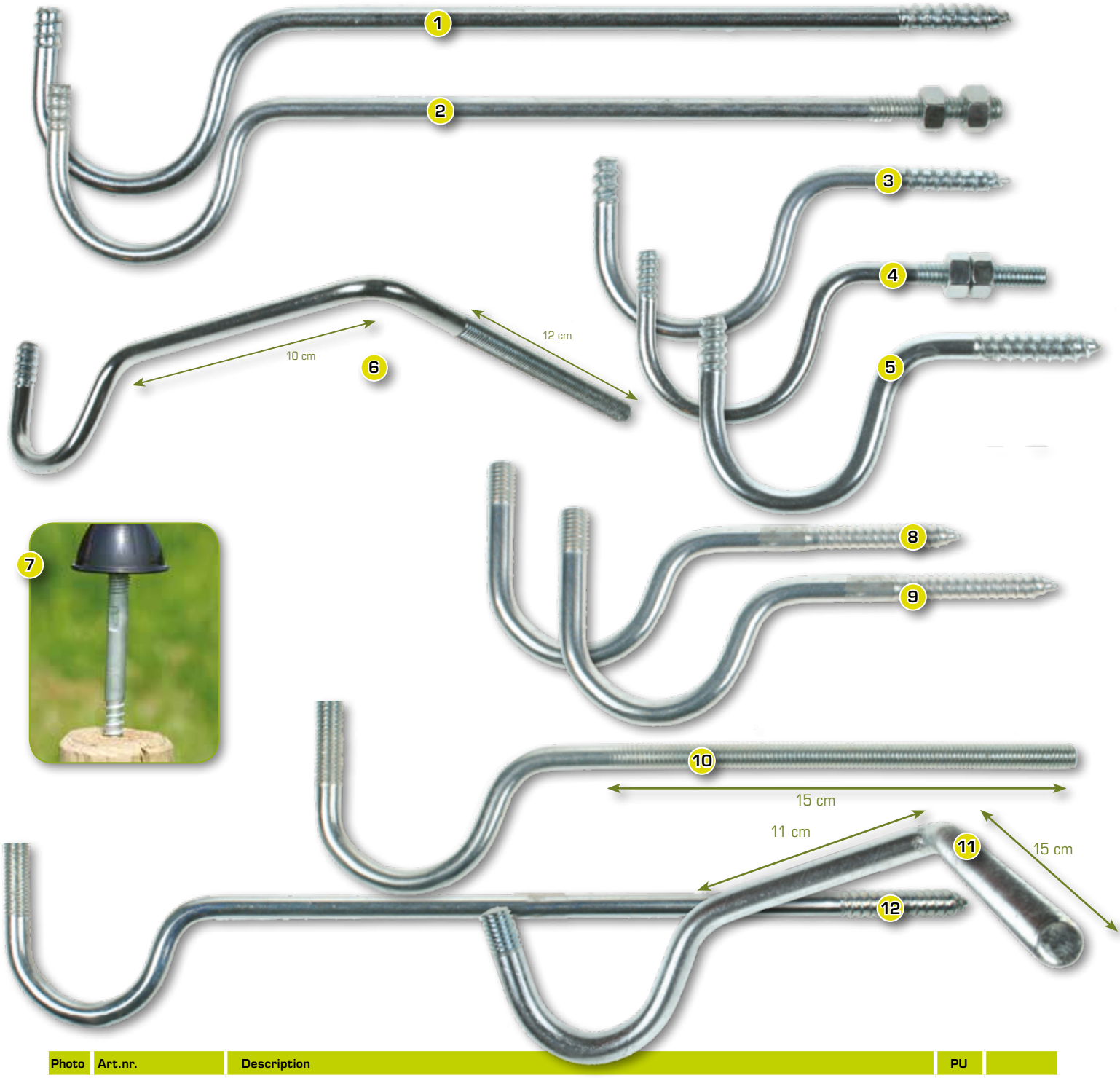


Photo	Art.nr.	Description	PU	
1	162-65009-10	Insulator brackets 20 cm long 6 mm, for wooden posts	10	
2	162-65010-10	Insulator brackets 20 cm long 6 mm, with M6 thread + nuts, for metal posts	10	
3	162-65011-25	Insulator brackets (swan neck short) 6 mm, for wooden posts	25	
4	162-65012-25	Insulator brackets (swan neck short) 6 mm, with M6 thread + nuts, for metal posts	25	
5	162-65013-25	Insulator brackets (swan neck short) 8 mm, for wooden posts	25	
6	162-65014-25	Insulator brackets (swan neck hooked) 8 mm with M8 thread + nuts, for concrete posts	25	
7	162-65000-50	Insulator brackets (straight) with M10 thread, for wooden posts	50	
8	162-65001-50	Insulator brackets (swan neck short) with M10 thread, for wooden posts	50	
9	162-65003-50	Insulator brackets (swan neck short) with M12 thread, for wooden posts	50	
10	162-65004-50	Insulator brackets (swan neck long 25cm) with M10 thread incl. nuts, for concrete posts	50	
11	162-65005-50	Insulator brackets (swan neck hooked) , with M10 thread incl. nuts, for concrete posts	50	
12	162-65002-50	Insulator brackets (swan neck long 35,5 cm) with M10 thread, for wooden posts	50	

PU=Package Unit Price incl. VAT

Photo	Art.nr.	Description	PU	
1	162-80027-25	Screw cap insulators, small, for 6 mm brackets	25	
2	162-80028-25	Screw cap insulators, small, incl. short 6 mm bracket for wooden posts	25	
3	162-80029-25	Screw cap insulators, small, incl. short 6 mm bracket for metal posts M6	25	
4	162-80045-25	Slit insulators, large, black, for 8 mm brackets	25	
	162-80035-25	Slit insulators, large, black, incl. short 8 mm bracket for wooden posts	25	
	162-80032-25	Slit insulators, large black, for M10 thread	25	
5	162-80040-25	Screw cap insulators, black screw cap, for M8, M10 and M12 thread	25	
6	162-80042-25	Screw cap insulators, red screw cap, for M8, M10 and M12 thread	25	
7	162-80044-25	Screw cap insulators, yellow screw cap, for M8, M10 and M12 thread	25	

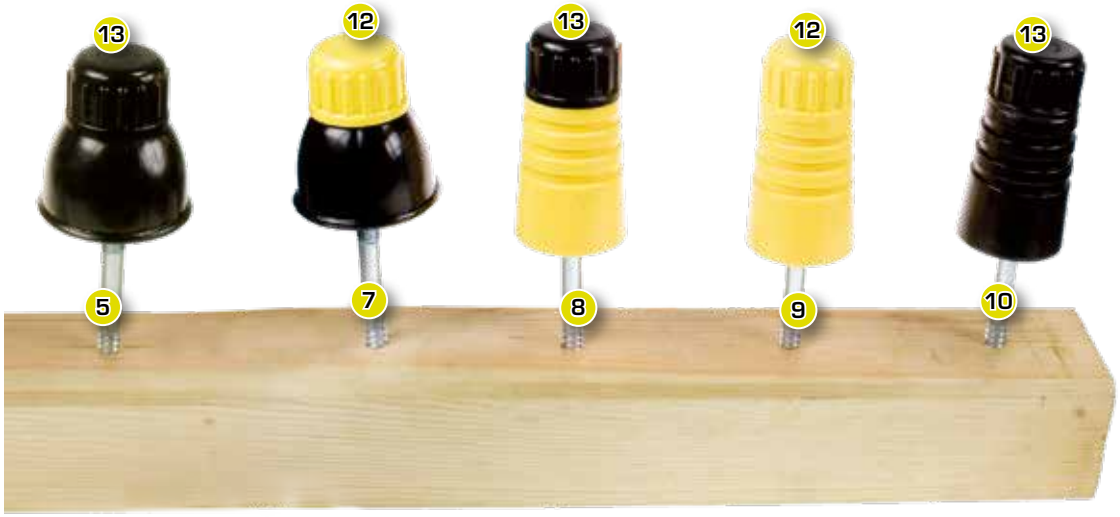


Photo	Art.nr.	Description	PU	
8	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
9	162-80054-G100	Dump insulators KOLTEC, complete yellow, for M10 and M12 thread	100	
10	162-80054-Z100	Dump insulators KOLTEC, complete black, for M10 and M12 thread	100	
11	162-65020-25	Caps, separate, black, for small screw cap insulator	25	
12	162-65023-25	Caps, separate, yellow, for KOLTEC Dump insulator end large screw cap insulator	25	
13	162-65022-25	Caps, separate, black, for KOLTEC Dump insulator end large screw cap insulator	25	
14	162-65024-25	Caps, separate,red, for KOLTEC Dump insulator end large screw cap insulator	25	

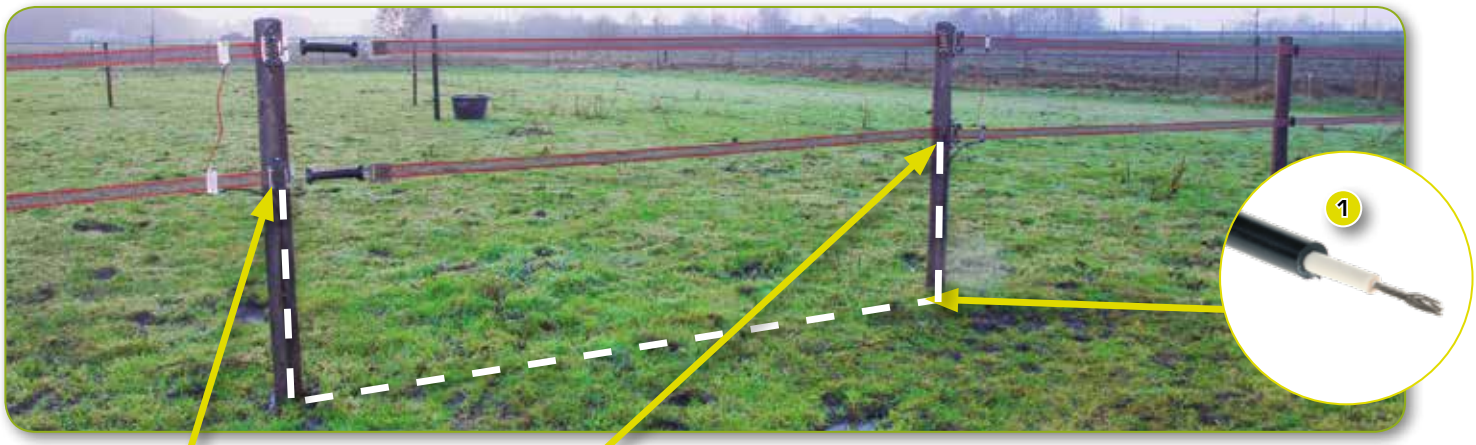
PU=Package Unit Price incl. VAT

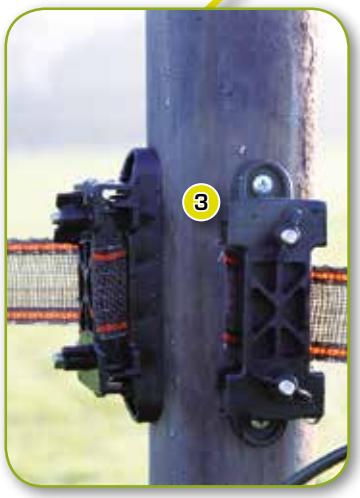
KOLTEC TIP

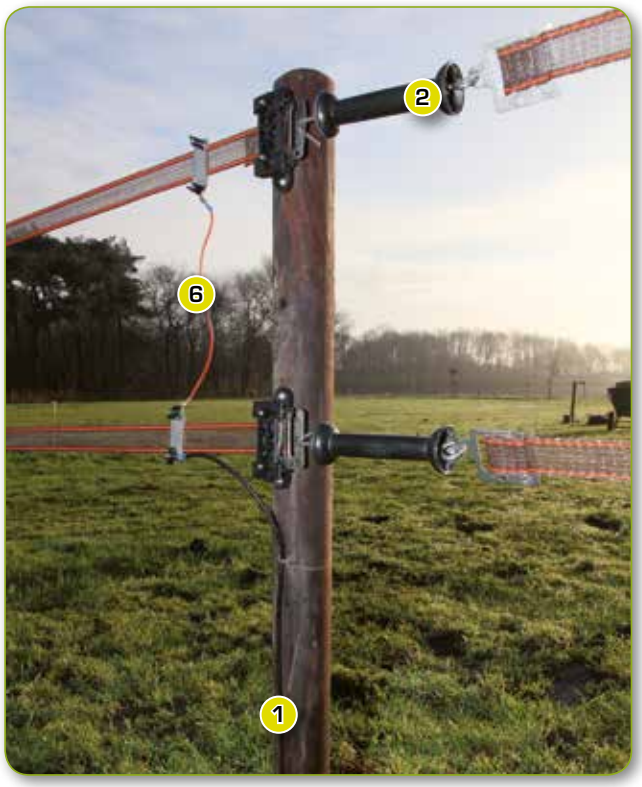
If both sides of the gate are connected with each other, the circuit in your application is always complete. The electric fence circuit will not be cut off by opening the gate, when this gate is part of the circuit.

Install your gate so that there is only tension when it is closed (by the gate handle anchor, which is under tension) en is tension free when it is opened.
Advantages of this way are:

- No loss of tension on your fence by on the ground lying gate handles.
- When passing the gate you have no shock effects by on the ground lying gate handles.
- No shock effect when your animal while passing stands on the current conductor of your gate.



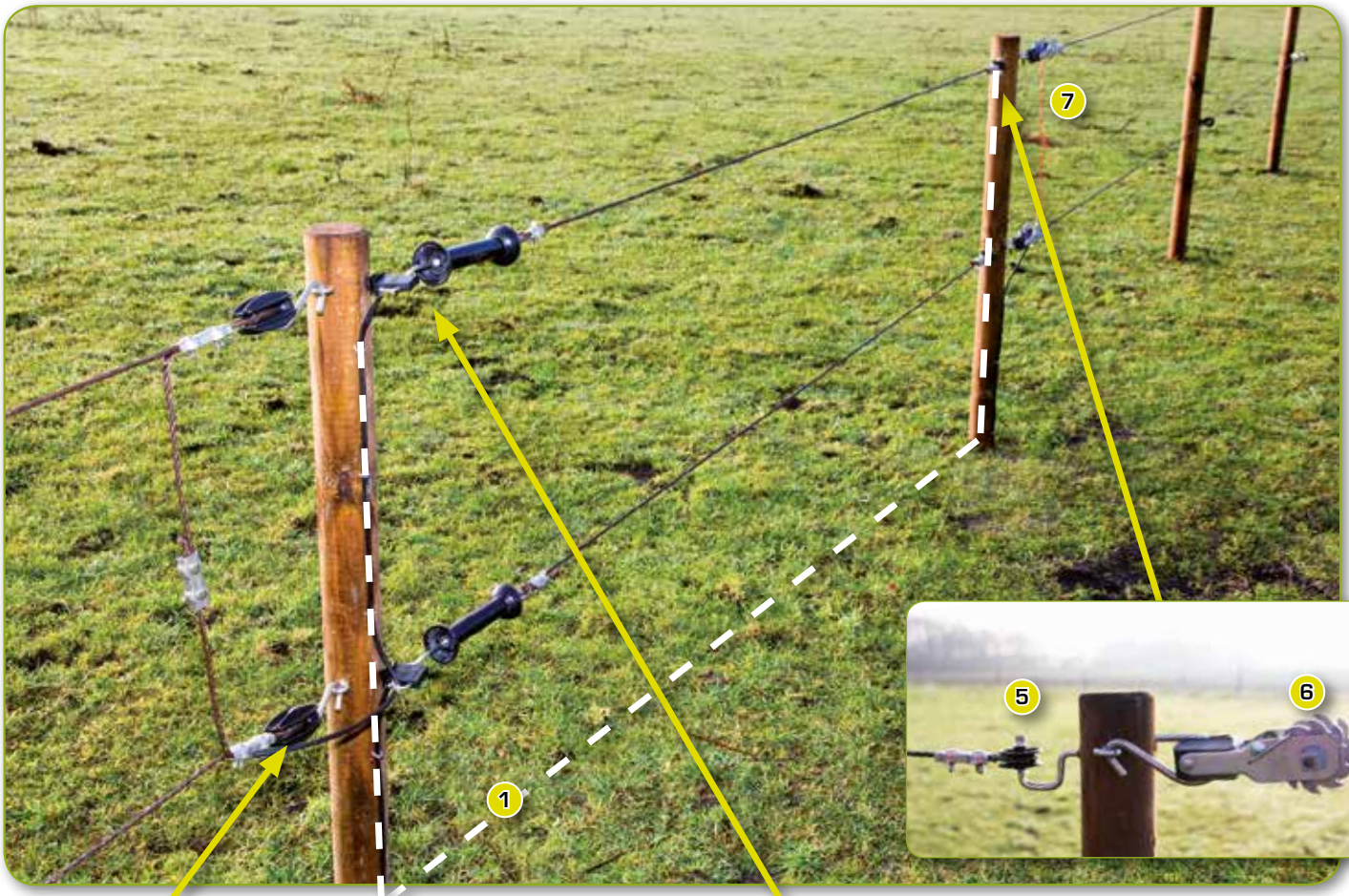




If you build your gate with springs, tape or rope, make sure that these get no tension anymore after opening the gate. Otherwise they lay on the ground sparking and short cut your electric fence. To build this in a good way connect only the gate handle side of the gate with the rest of your application. Due to the underground connection, the gate is not a part of the circuit and it is always safe to open the gate without cutting off the rest of the circuit.

Photo	Art.nr.	Description	PU	
1	133-36122-10	High tension cable, coil with 10 mtr	10	
2	162-80003	Gate kit for tape, INOX, variable wideness	1	
3	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
4	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
5	162-85612-2	Connection kit for tape/HT-cable, with ring and connection eye	2	
6	162-85603-2	Connection kit, INOX, for tape, with 70 cm long wire	2	

PU=Package Unit Price incl. VAT



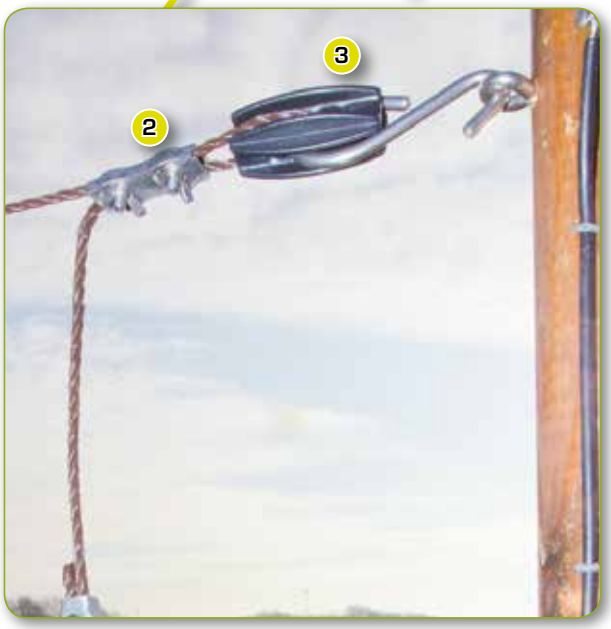


Photo	Art.nr.	Description	PU	
1	133-36122-10	High tension cable, coil with 10 mtr	10	
2	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
3	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
4	162-80002	Gate kit for rope, INOX, variable wideness	1	
5	162-80075-4	Corner roll insulators for wire and rope for wooden posts	4	
6	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
7	162-85604-2	Connection kit, INOX, for rope, with 50 cm long wire	2	

PU=Package Unit Price incl. VAT

GATE MATERIAL

Special plastic-alloy.

No cracks will occur, therefore a good insulation is ensured, even after years of use.

UV-radiation resistant.

Strong spring for a tight gate closure.

Strong construction for long term durable use.

KOLTEC TIP

Be aware that you buy the real KOLTEC gate handle. Our logo on the product will guarantee this.

1-12 & 14. KOLTEC GATE HANDLE
The KOLTEC gate handle is made of a special plastic-alloy. No cracks will occur, therefore a good insulation is ensured, even after years of use. You don't have to be afraid getting a shock of your own gate handle. Extreme UV-radiation resistant. With a strong spring for a tight gate closure. Strong construction for long term durable use. This gate handle is often copied, but never with this quality level. Be aware that you buy the real Koltec gate handle. Our logo on the product will guarantee this. Available in black, red and yellow.

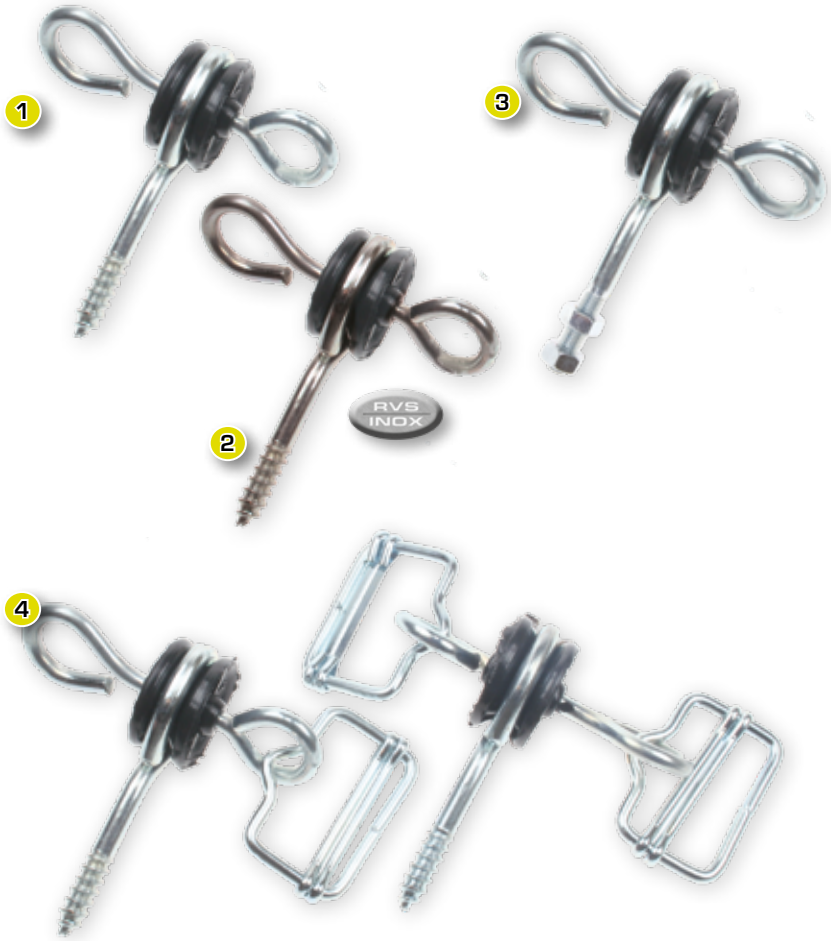
1, 7, 9 & 12 KOLTEC INOX GATE HANDLE
The KOLTEC-gate handle is also available in INOX, in the colours brown,black, white and red.

13. GATE HANDLE
Basic gate handle

Photo	Art.nr.	Description	PU	
1	162-79037	Gate handle, KOLTEC, brown INOX	1	
2	162-79036	Gate handle, KOLTEC, brown	1	
3	162-79033	Gate handle, KOLTEC, neon yellow	1	
	162-79033-4	Gate handles, KOLTEC, neon yellow, package of 4	4	
4	162-79034	Gate handle, KOLTEC, neon green	1	
	162-79034-4	Gate handles, KOLTEC, neon green, package of 4	4	
5	162-79035	Gate handle, KOLTEC, neon violet	1	
	162-79035-4	Gate handles, KOLTEC, neon violet, package of 4	4	
6	162-80020	Gate handles KOLTEC, black	1	
7	162-80019	Gate handle KOLTEC, black, INOX	1	
8	162-79030	Gate handle, KOLTEC, red	1	
9	162-79031	Gate handle, KOLTEC, red INOX	1	
10	162-79020	Gate handle, KOLTEC, yellow	1	
11	162-79038	Gate handle KOLTEC, white	1	
12	162-79039	Gate handle KOLTEC, white INOX	1	
13	162-80029	Gate handle, black, budget, separate	1	
14	162-79010-2	Gate handle, black with fixed tape clamp, per 2 pieces	2	
	162-79011-2	Gate handle, white with fixed tape clamp, per 2 pieces	2	

PU=Package Unit Price incl. VAT

GATE HANDLE ANCHORS



1-3. GATE HANDLE ANCHOR
Handy anchor with rotating eyes to hook into. (Per 4 or 10 pcs) for wooden posts, also available in an INOX version. This insulator is also available for metal posts with M6 thread incl. two nuts.

4. ANCHOR/TAPE CONNECTOR SET
Combination of two anchors with 3 tape connectors. Perfect combination with code 162-80023-2 for a simple gate with tape.

5. PINLOCK INSULATOR WITH ANCHOR PLATE.
With INOX three-way plate, incl. a wire connector. Very solid and practical anchor with INOX plate to hook into.

6. PINLOCK INSULATOR WITH ANCHOR PLATES.
With INOX two-way plate.
Very solid and practical anchor with INOX plates to hook into, included INOX bolt and two nuts.

7. SOLID TAPE INSULATOR WITH INOX PLATE
Very solid insulators with INOX tape connector for the connection of tape, laying out a three-way crossing for fencing in-between pastures and as gate handle anchor/en insulator.

8. INOX CONNECTION PLATE
Single INOX plate for the solid tape insulator.
Art.nr. 162-80068-4, see also page 68

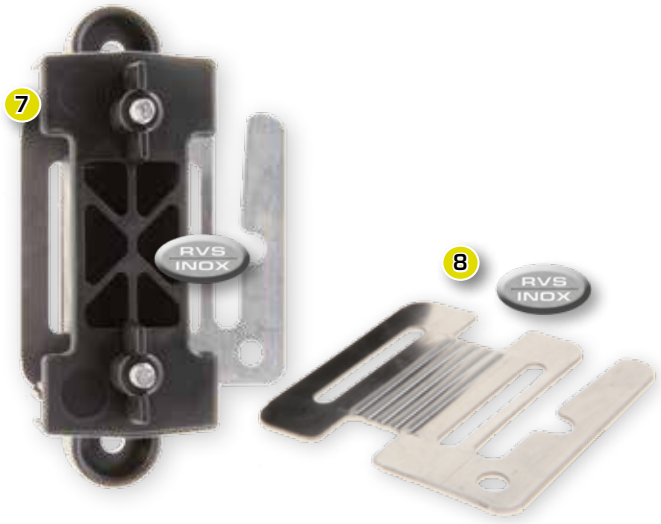


Photo	Art.nr.	Description	PU	
1	162-80079-4	Gate handle anchors	4	
	162-80079-10	Gate handle anchors	10	
2	162-79040-4	Gate handle anchors, INOX	4	
3	162-79045-4	Gate handle anchors with M6 thread incl. 2 nuts	4	
4	162-80080-2	Gate handle anchors kit, with 2 gate handle anchors and 3 tape connectors	2	
5	162-80167-4	Pin lock insulator, with stainless steel gate handle anchor and connection nut	4	
6	162-80083-2	Pin lock insulators with INOX "two-way" gate handle anchor	2	
7	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
8	137-80069	Connection plate, INOX, for insulator 162-80068-4	1	

PU=Package Unit Price incl. VAT

1-2. KOLTEC GATE HANDLE ANCHORS
Koltec has developed two new types of the gate handle anchors which make it easy to assemble. Very strong, without turning parts. The gate handle anchor is made in a way that animals can't injure themselves to this insulator. The two way is ideal for gate closures. The three-way is ideal to make splittings and compartments. These gate handle anchors are available in a galvanized and in an INOX version.
Packed per 4.

Photo	Art.nr.	Description	PU	
1	162-79079-4	Gate handle anchors KOLTEC, 2-way, galvanized	4	
	162-79080-4	Gate handle anchors KOLTEC, 2-way, INOX	4	
2	162-79081-4	Gate handle anchors KOLTEC, 3-way, galvanized	4	
	162-79082-4	Gate handle anchors KOLTEC, 3-way, INOX	4	
3	162-79083-4	Gate handle anchors KOLTEC, 3-way, galvanized, for metal posts M6, incl. 2 nuts	4	
	162-79084-4	Gate handle anchors KOLTEC, 3-way, INOX, for metal posts M6, incl. 2 nuts	4	

PU=Package Unit Price incl. VAT

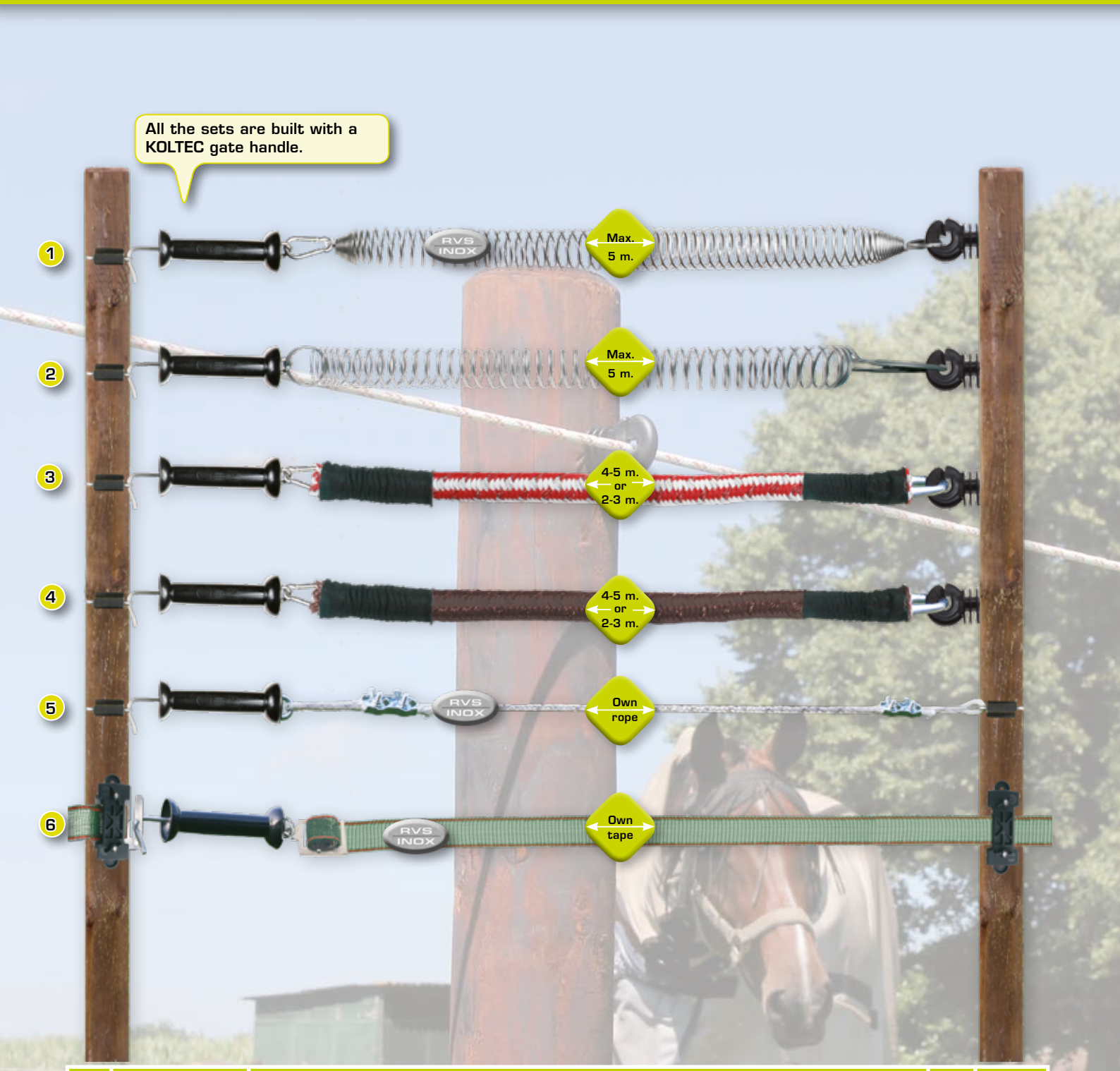


Photo	Art.nr.	Description	PU	
1	162-80041	Gate kit, INOX, with spring. Not suitable for horses	1	
2	162-80004	Gate kit with spring, galvanized, not suitable for horses	1	
3	137-80025	Cable 4 -5 mtr red /white, elastic, separate	1	
	162-80025	Gate kit, elas. cable, red/white, for gates up to 5 mtr, incl. gate handles and insulators	1	
	137-80026	Cable 2 -3 mtr red /white, elastic, separate	1	
	162-80026	Gate kit, elas. cable, red/white, for gates up to 3 mtr, incl. gate handles and insulators	1	
4	137-80008	Cable 2 -3 mtr, brown, elastic, separate	1	
	162-80008	Gate kit, elastic, brown, for gates from 2 - 3 mtr	1	
	137-80014	Cable 4 -5 mtr brown, elastic, separate	1	
	162-80014	Gate kit, elastic, brown, for gates from 4 -5 mtr	1	
5	162-80002	Gate kit for rope, INOX, variable wideness	1	
6	162-80003	Gate kit for tape, INOX, variable wideness	1	

PU=Package Unit Price incl. VAT

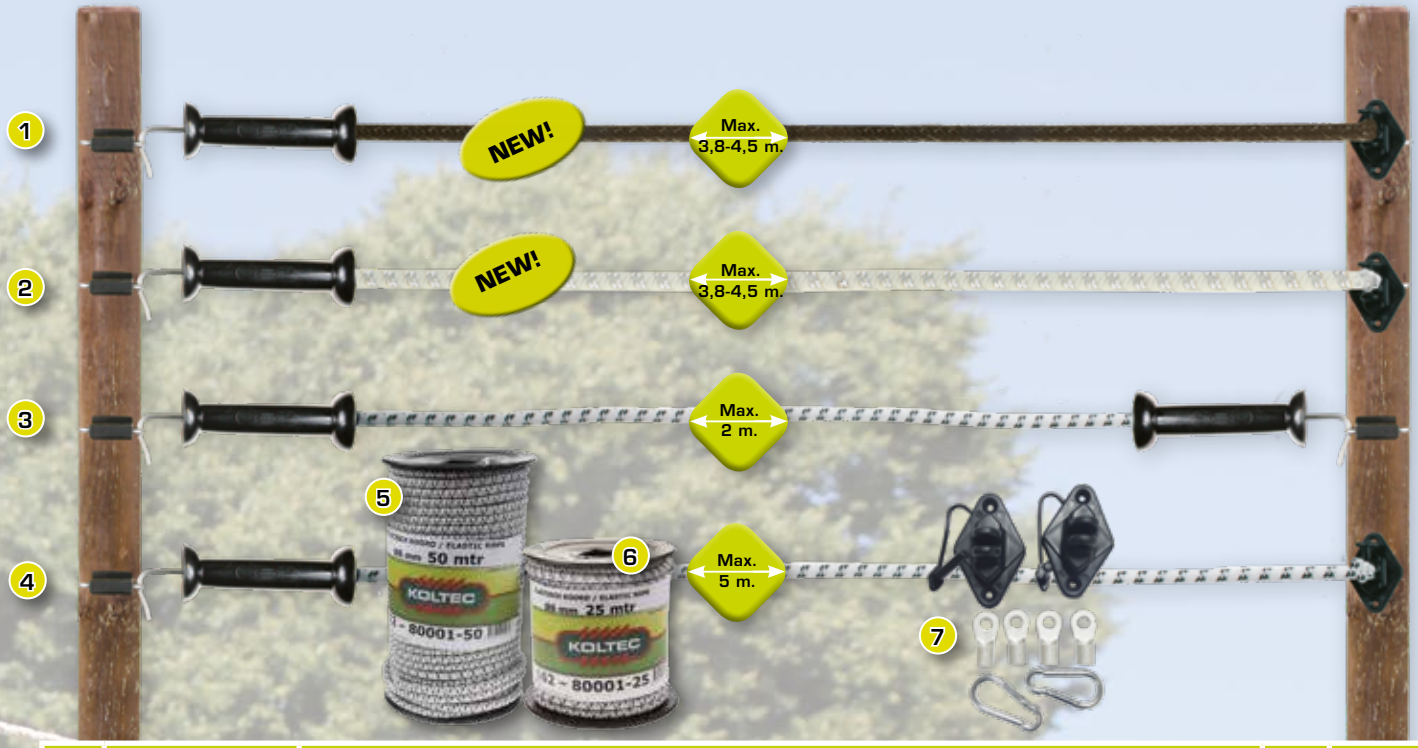


Photo	Art.nr.	Description	PU	
1	162-79990	Elastic rope kit for 4,5 mtr, 10 mm brown INOX	1	
	162-79990-100	Elastic rope, 10 mm brown	100	
2	162-79991	Elastic rope kit for 4,5 mtr, 10 mm white INOX	1	
	162-79991-100	Elastic rope, 10 mm white	100	
3	162-80007	Gate kit with elastic rope and 2 gate handles for gates up to 2 mtr	1	
4	162-80001	Gate kit with elastic rope, for gates up to 6 mtr	1	
5	162-80001-50	Rope elastic on a 50 mtr coil	50	
6	162-80001-25	Rope elastic on a 25 mtr coil	25	
7	162-80001-2mn	Mounting kit for elastic rope	2	
	162-79990-2mn	Mounting kit for elastic rope	2	

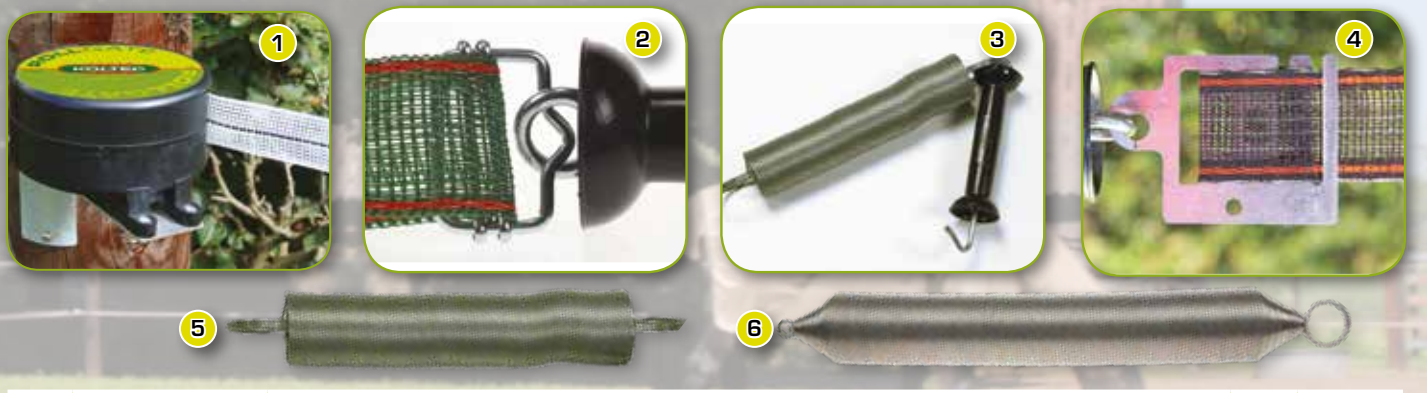


Photo	Art.nr.	Description	PU	
1	162-85463	Rollgate with white tape, unwinnable up to 6 mtr	1	
	162-85464	Rollgate with rope, unwinnable up to 6 mtr	1	
	162-85468	Rollgate with black tape, unwinnable up to 6 mtr	1	
2	162-80023-2	Gate handles KOLTEC, black, with tape connectors	2	
3	162-80024	Gate handle KOLTEC, black with spring	1	
4	162-80143-2	Gate handle plates, INOX, for connecting tape up to 50 mm to a gate handle	2	
5	136-60258	Spring (single)	1	
6	136-60263	Spring (single) INOX	1	

PU=Package Unit Price incl. VAT

1. ROTOR STRAINER
Aluminum-alloy strainer for wire and rope. The strainer can be mounted without breaking the wire.
A separate clamp to tighten is separately available.

2. STRAIN HANDLE
Handle for rotor strainer, to strain a wire in line in an easy way.

3. STRAIN HANDLE
Straining handle tool for usage with the strainers 4, 5 and 6.

4. RATCHET STRAINER
Solid wire strainer to increase tension on the fence wire.

5 INSULATED RATCHET STRAINER
Solid wire strainer with integrated connection insulator.

6. ROPE STRAINER
With this strainer you can easily adjust rope to the right pull tension. The ratchet strainer has an insulator and a mounting hook. Provided also with a screw eye that can be screwed in a post for a firm and quick mounting of the strainer.

7. TAPE STRAINER
Sturdy re-inforced tape strainer to strain tape up to 45 mm

8. STEEL WIRE STRAINER
High-grade galvanized steel wire strainer, 130 mm long.

9. SMALL STEEL WIRE STRAINER
Small steel strainer, 85 mm long, 30 mm wide.

10. TAPE STRAINER
U-profile strainer for in-line tensioning of tape up to 40 mm (per 2 pcs).

11. PLASTIC WIRE STRAINER
Wire strainer for thin poly wire.

12-13. REINFORCED PLASTIC WIRE STRAINER
Suitable for poly wire, aluminum and stranded wire.

14. PLASTIC WIRE STRAINER
Very light green plastic wire strainer for poly wire and aluminum wire.This strainer is also suitable for tape up to a width of 20 mm. Because of the special construction, this strainer can be mounted in line without cutting the wire. (per 2 pcs).

Photo	Art.nr.	Description	PU	
1	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope 50 pcs	50	
2	162-80147	Strain handle for rotor strainer	1	
3	162-80154	Strain handle for ratchet strainers	1	
4	162-80140	Ratchet strainer, solid for aluminium and steel wire	1	
5	162-80148	Ratchet strainer, solid with integrated insulator, for wire	1	
6	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
	162-80160-2	Straining set, INOX, for rope, with hook and screw eyes	2	
7	162-80173-3	Tape strainer, synthetic	3	
8	162-80145	Wire strainer, large, galvanized, 13 cm long and 5 cm wide (nr.4)	1	
9	162-80144	Wire strainer, small, galvanized, 10 cm long and 3 cm wide (nr.2)	1	
10	162-80141-2	Tape strainers, synthetic for slightly straining tape up to 50 mm	2	
11	162-80176-2	Wire strainer for thin synthetic wire	2	
12	162-80150-wit	Strainer reinforced, synthetic, white, for wire	1	
	162-80150-2wt	Strainer reinforced, synthetic, white, for wire, package of 2	2	
13	162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
14	162-80150-2	Strainers, synthetic, green, for wire and tape up to 20 mm	2	

PU=Package Unit Price incl. VAT

1 - 4. STRAIN SETS
for a quick an easy mounting of steel-galvanized- and aluminum wire.
Supplied with an egg-insulator with hook, spring and optional ratchet strainer.
Available in INOX or galvanized steel.

5 - 6. SMALL STRAIN SETS
for a quick mounting of aluminum- and poly wire.
Spring supplied with an egg-insulator with 2 hooks and small strainer.
Available in INOX or galvanized steel.

7 - 8. STRAINING SPRING, LARGE
This spring is suitable for tensioning steel- and aluminum wire. The spring captures elongation and shrinkage of the wire by temperature fluctuations. By using a straining spring you can double the distance between the fence posts. The wire will always be nicely tight without risk of breaking.
Available in INOX or galvanized steel.

9 - 10. STRAINING SPRING, SMALL
Special spring for tensioning rope and thin metal wire.
Available in INOX or galvanized steel.

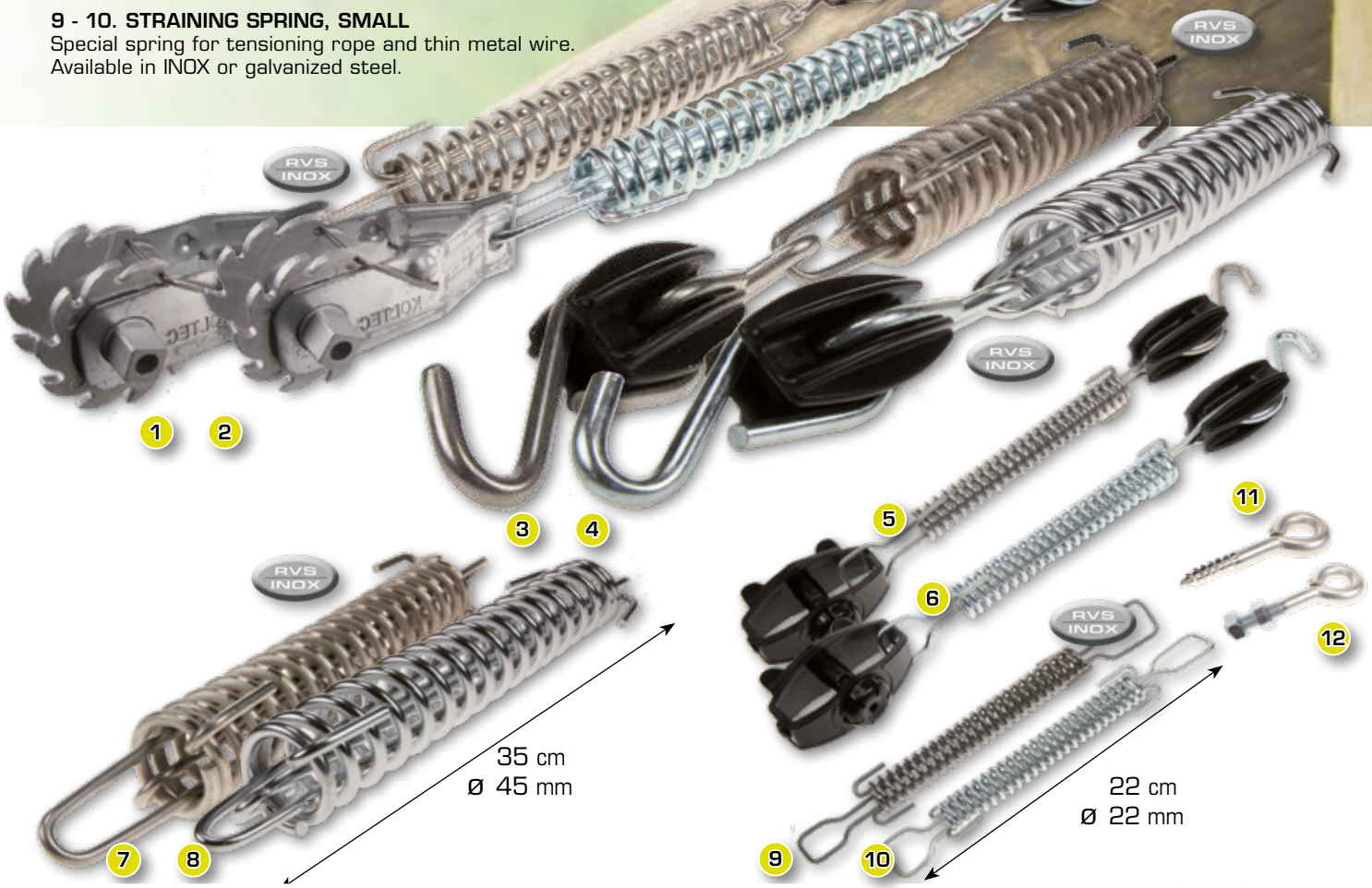
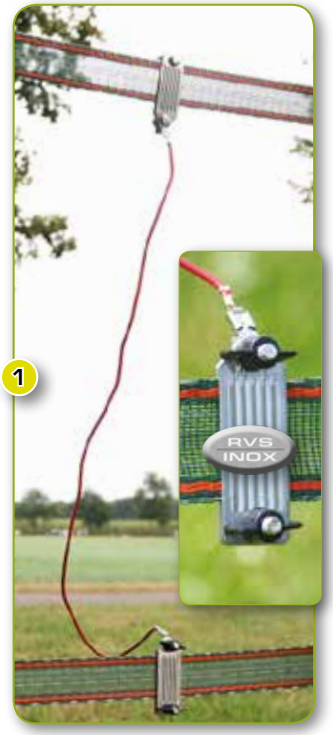
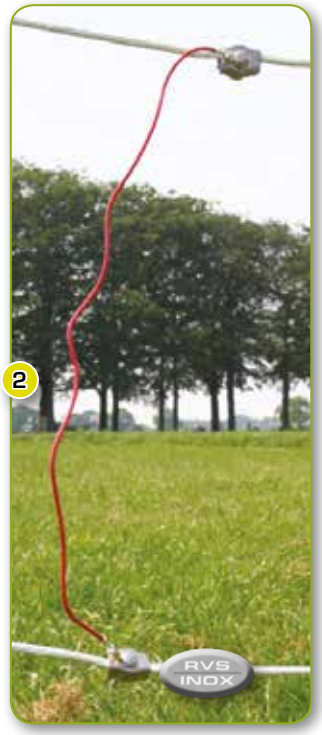


Photo	Art.nr.	Description	PU	
1	162-70505	Strain set, INOX, egg-insulator with hook, spring and ratchet strainer	1	
2	162-70503	Strain set, egg-insulator with hook, spring and ratchet strainer	1	
3	162-70507	Strain set, INOX, egg-insulator with INOX hook and INOX strain spring	1	
4	162-70502	Strain set, egg-insulator with hook and strain spring	1	
5	162-70508	Strain set with strainer, egg-insulator with INOX hooks and small spring	1	
6	162-70509	Strain set with strainer, egg-insulator with galvanized hooks and small spring	1	
7	162-80149-rvs	Straining spring, large, INOX, for steel wire	1	
8	162-80149	Straining spring, large, galvanized, for steel wire	1	
9	162-80151	Straining spring, small, INOX, for thin metal wire and rope	1	
10	162-80155	Straining spring, small, galvanized, for thin metal wire and rope	1	
11	136-60261	Screw eye	1	
	136-60262	Screw eye, INOX	1	
12	136-60264	Screw eye, INOX, for metal posts, 80 mm M8	1	

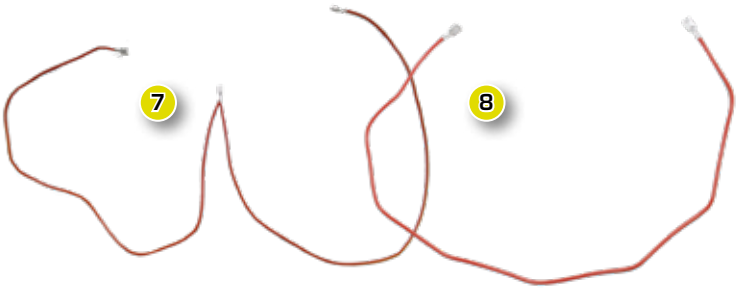
PU=Package Unit Price incl. VAT

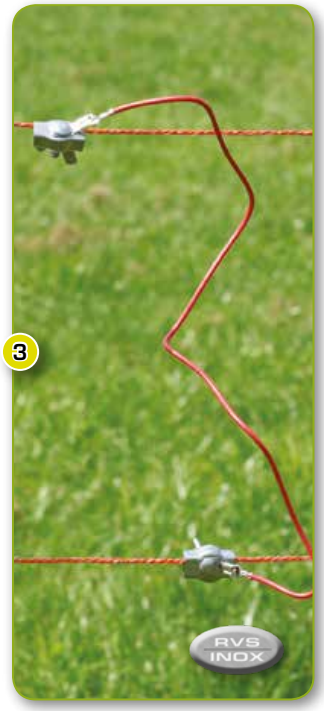


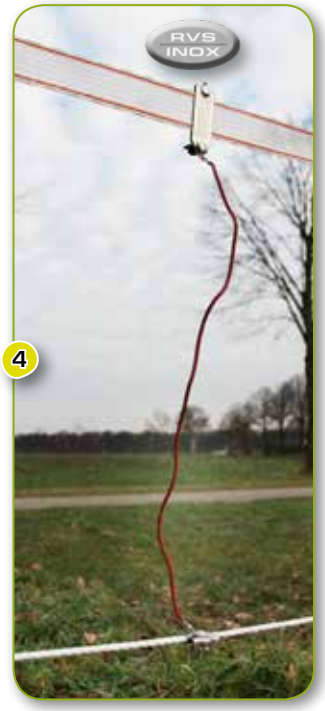


KOLTEC TIP

Cross connections are very important for an optimal working electric fence. By connecting the conductors, like wire or tape, every 200 mtr with each other, you will optimize the tension in your fence system. Good connections can optimize your fence with up to 2,000 Volt.







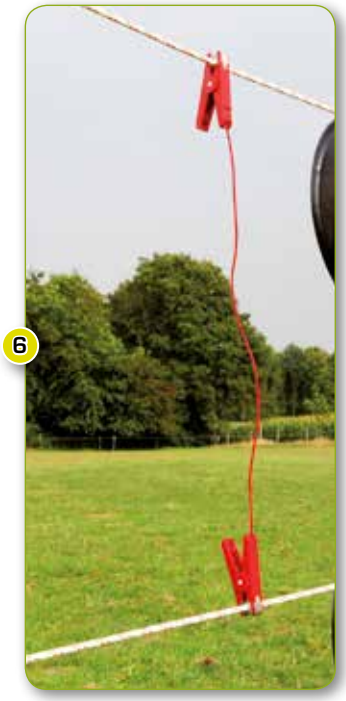
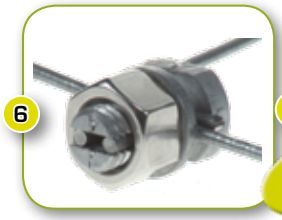
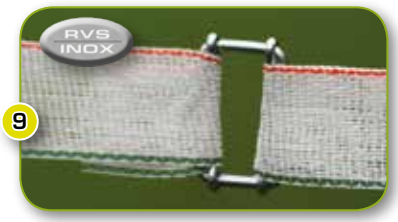


Photo	Art.nr.	Description	PU	
1	162-85603-2	Connection kit, INOX, for tape, with 70 cm long wire	2	
2	162-85604-2	Connection kit, INOX, for rope, with 70 cm long wire	2	
3	162-85605-2	Connection kit, INOX, for wire, with 70 cm long wire	2	
4	162-85601-2	Connection kit, INOX, tape to rope, with 70 cm long wire	2	
5	162-85611-2	Connection kit, zinc plated, for wire and rope with heart shape connectors	2	
6	162-85613-2	Reel cable kit, connecting conductors to main fence	2	
7	162-85614-2	Connection cable kit, 3-way, HT 60 cm	2	
8	162-85615-2	Connection cable kit, single, HT 60 cm	2	

PU=Package Unit Price incl. VAT





1-2. ROPE AND WIRE CONNECTORS
Handy, good conducting rope connector with butter-fly-nuts for easy mounting without wrenches.
Per 4 pcs, INOX or galvanized.

3-7. SINGLE ROPE AND WIRE CONNECTORS
INOX, Alu-aloy, Alu, galvanized or from plastic.

8. INOX TAPE CONNECTOR
INOX tape connector for tape up to 50 mm
Per 4 pcs.

9. GALVANIZED TAPE CONNECTOR
For tape up to 40 mm
Per 4 or 10 pcs.

10. ALUMINUM TAPE CONNECTOR
For tape up to 20 mm.
Per 4 or 10 pcs.

11. GATE HANDLE PLATE
INOX gate handle plate
Per 2 pcs.

12. INOX TAPE CONNECTOR
INOX tape connector for tape up to 50 mm
Per 4 pcs.

KOLTEC TIP

Prevent sparking and loss of tension at connection points in your fence by using decent connectors and connection kits.

Photo	Art.nr.	Description	PU	
1	162-39096-4	Connectors for wire up to 4 mm, galvanized, with wing nuts	4	
	162-39099-4	Connectors for wire up to 4 mm, INOX, with wing nuts	4	
2	162-39097-4	Connectors for rope up to 8 mm, galvanized, with wing nuts	4	
	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
	162-39088	Connector for rope up to 10 mm, INOX, with M6 nuts	1	
3	162-39091-4	Connectors, single for wire up to 4 mm, galvanized with wing nuts	4	
	162-39093-4	Connectors, single for wire up to 4 mm, INOX, with wing nuts and connection tab	4	
4	162-39092-4	Connectors, single for rope up to 8 mm, galvanized with wing nuts	4	
	162-39094-4	Connectors, single for rope up to 8 mm, INOX, with wing nuts and connection tab	4	
5	162-39079-4	Connectors, galvanised, single for 8 - 10 mm, per 4	4	
6	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
7	162-39034-4	Wire connectors for thin wire	4	
8	162-80142-4	Connectors, INOX, for tape up to 50 mm	4	
9	162-39095-10	Connectors for tape up to 40 mm, galvanized	10	
	162-39095-4	Connectors for tape up to 40 mm, galvanized	4	
10	162-39090-10	Connectors, aluminium, for tape up to 20 mm	10	
	162-39090-4	Connectors, aluminium, for tape up to 20 mm	4	
11	162-80143-2	Gate handle plates, INOX, for connecting tape up to 50 mm to a gate handle	2	
12	162-39400-4	Tape connection plates, 4 pcs	4	

PU=Package Unit Price incl. VAT

1. REEL

Ideal large reel with mounting frame to mount on a mounting post without accessories. The reel is supplied with a locking ratchet and an adjustable break.

3. REEL CABLE KIT

These set is developed to connect the conductors with the main fence. The set is also useable to connect the conductors among themselves.

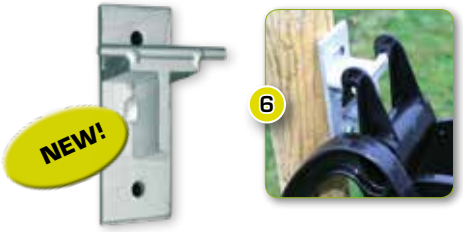


Photo	Art.nr.	Description	PU	
1	162-39026	Reel, large with mounting frame	1	
2	162-39029-1	Reel for 162-39029 & 162-39026, spare	1	
3	162-60022	Support bracket for reel 162-39026	1	
4	162-60021	Support bracket for reel 162-39024 & 25	1	
5	162-60023	Support bracket for reel 162-39029	1	
6	162-60024	Support bracket for reel 162-39027 & 31	1	

PU=Package Unit Price incl. VAT

1. PRACTICAL SMALL REEL
Small versatile reel. Solid and durable for poly wire, rope and tape.
The reel is detachable and can be replaced by a reel with wire, rope or tape.
The reel has a construction that makes it possible to hang it on the existing fence, or on the KOLTEC angle iron post, code 162-80108. (In combination with code 162-39032-2).
Spool is suitable for 100 mtr 40 mm poly tape or upto 1,000 mtr thin poly wire.

5. SMALL REEL
Small versatile reel. Solid and durable for poly wire, rope and tape.
The reel has a construction that makes it possible to hang it on the existing fence, or on the KOLTEC angle iron post. (In combination with code 162-39032-2)

7. LARGE REEL WITH STRAP
Handy reel with locking ratchet and supplied with strap, which makes it easy to carry when spooling the wire, rope or tape.

9. LARGE REEL
Sturdy reel, with hook. Capacity for 200 mtr tape or 500 mtr wire.

10. LARGE REEL GEARED 1:3
Reel equipped with an accelerator mechanism for fast spooling of wire, rope or tape. The drum rotates three times faster. Capacity for 200 mtr tape or 500 mtr wire

11. WIRE DISPENSER
Heavy duty dispenser for easy unwinding of high tensile wire.

Reel	Art.Nr.	Indication of the reel capacity					
Conductor	Mtr's	162-39026	162-39029	162-39024	162-39025	162-39027	162-39031
Wire	12 PE	2000	2000	1500	1500	750	500
Wire	18 PE	1000	1000	750	750	500	300
Wire	24 PE	750	750	500	500	300	200
Rope	4 mm	500	500	300	300	150	75
Rope	6 mm	200	200	150	150	100	50
Tape	12,5 mm	500	500	400	400	300	200
Tape	20 mm	400	400	300	300	200	100
Tape reinf.	20 mm	300	300	200	200	100	75
Tape	40 mm	150	150	100	100	75	50
Tape reinf.	40 mm	100	100	75	75	50	25

Photo	Art.nr.	Description	PU	
1	162-39027	Reel, small, all-round	1	
2	162-39028	Reel for 162-39027, spare	1	
3	162-39027-1	Brake pin, single, spare	1	
4	136-80127	Reel hook for fences	1	
5	162-39031	Small reel, handy for strip grazing	1	
6	162-39032-2	Hooks for mounting reels on green corner post	2	
7	162-39029	Reel, large with strap	1	
8	162-39029-1	Reel for 162-39029 & 162-39026, spare	1	
9	162-39024	Reel, large for 200 mtr tape/500 mtr polywire	1	
10	162-39025	Reel, large geared 1:3 for 200 mtr tape/500 mtr polywire	1	
11	162-39033	Wire dispenser for heavy steel wire	1	

PU=Package Unit Price incl. VAT

1. CORNER LINE POST
Hot dipped, galvanized corner post with M12 thread.
Delivered without insulator.
This post is also made suitable to mount the Powergard and Powergard XP.

2. ANGLE IRON CORNER POST
Green coated corner post with various connection possibilities, top insulator not included. Can also be used as reel corner post with the separate available hook.

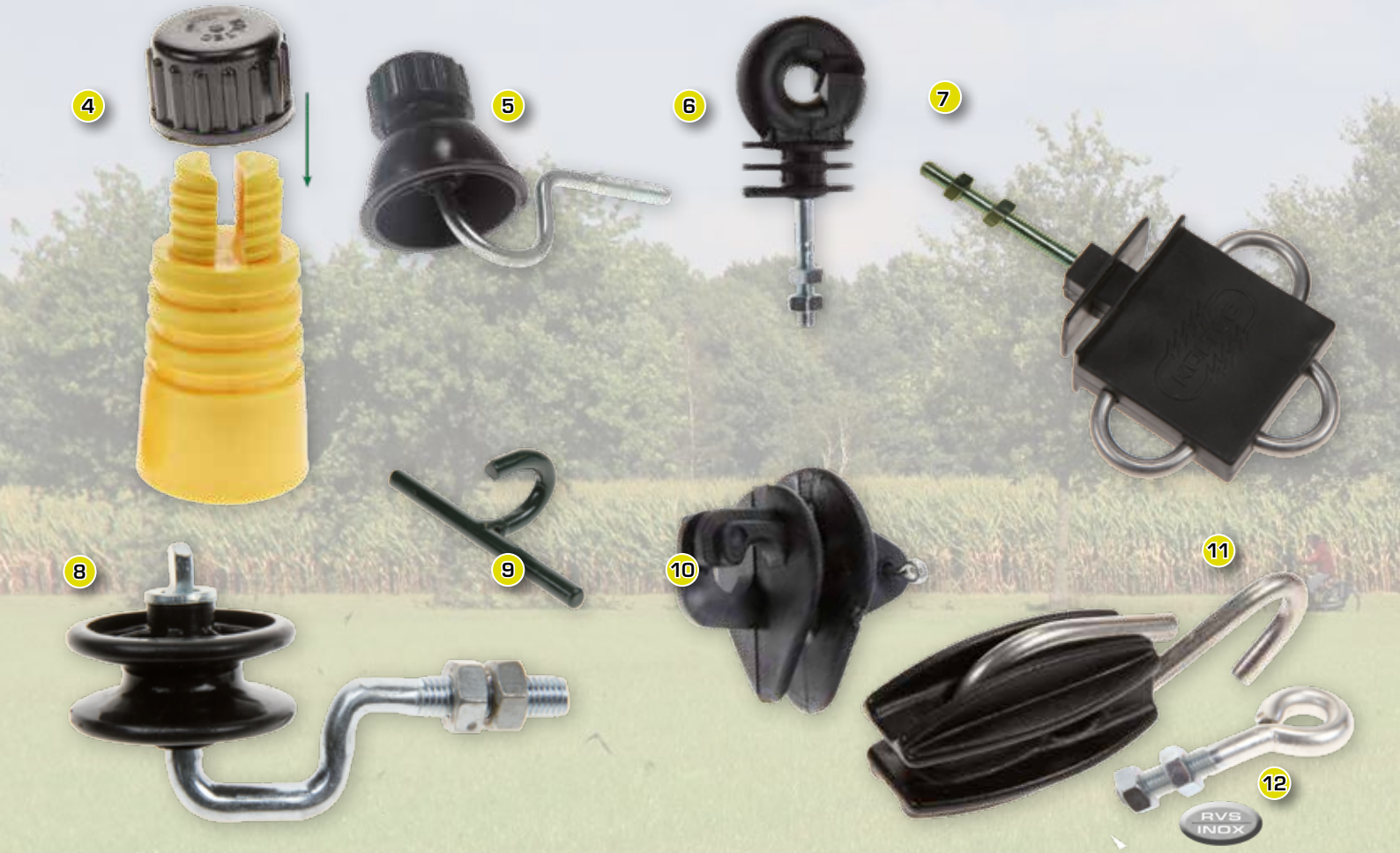


Photo	Art.nr.	Description	PU	
1	162-80121-15	Corner post, galvanized, 105 cm with M12 thread	15	
2	162-80108	Corner post, green, 130 cm with M12 thread, powder coated	1	
3	162-80109	Foot rod, specially for the green corner post	1	
Accessories				
4	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
5	162-80029-25	Screw cap insulators, small, incl. short 6 mm bracket for metal posts M6	25	
6	162-80095-25	Ring insulators with M6 on metal posts	25	
7	162-79083-4	Gate handle anchors KOLTEC, 3-way, galvanized, for metal posts M6	4	
8	162-80012-4	Corner roll insulators for rope and wire for metal posts with M6 thread incl. 2 nuts	4	
9	162-39032-2	Hooks for mounting reels on green corner post	2	
10	162-80038-4	Split insulators for angle iron post	4	
11	162-70500	Egg-insulator with 1 hook, single	1	
12	136-60264	Screw eye, INOX, for metal posts, 80 mm M8	1	

PU=Package Unit Price incl. VAT

140 cm
130 cm
120 cm
110 cm
100 cm
90 cm
80 cm
70 cm
60 cm
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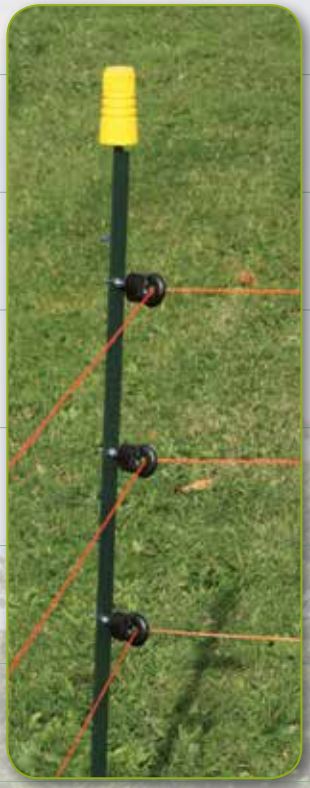
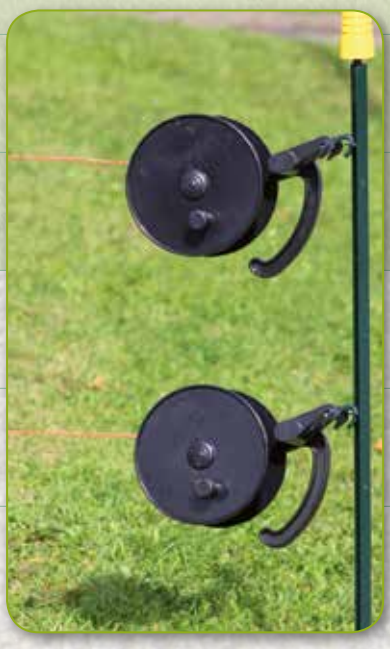
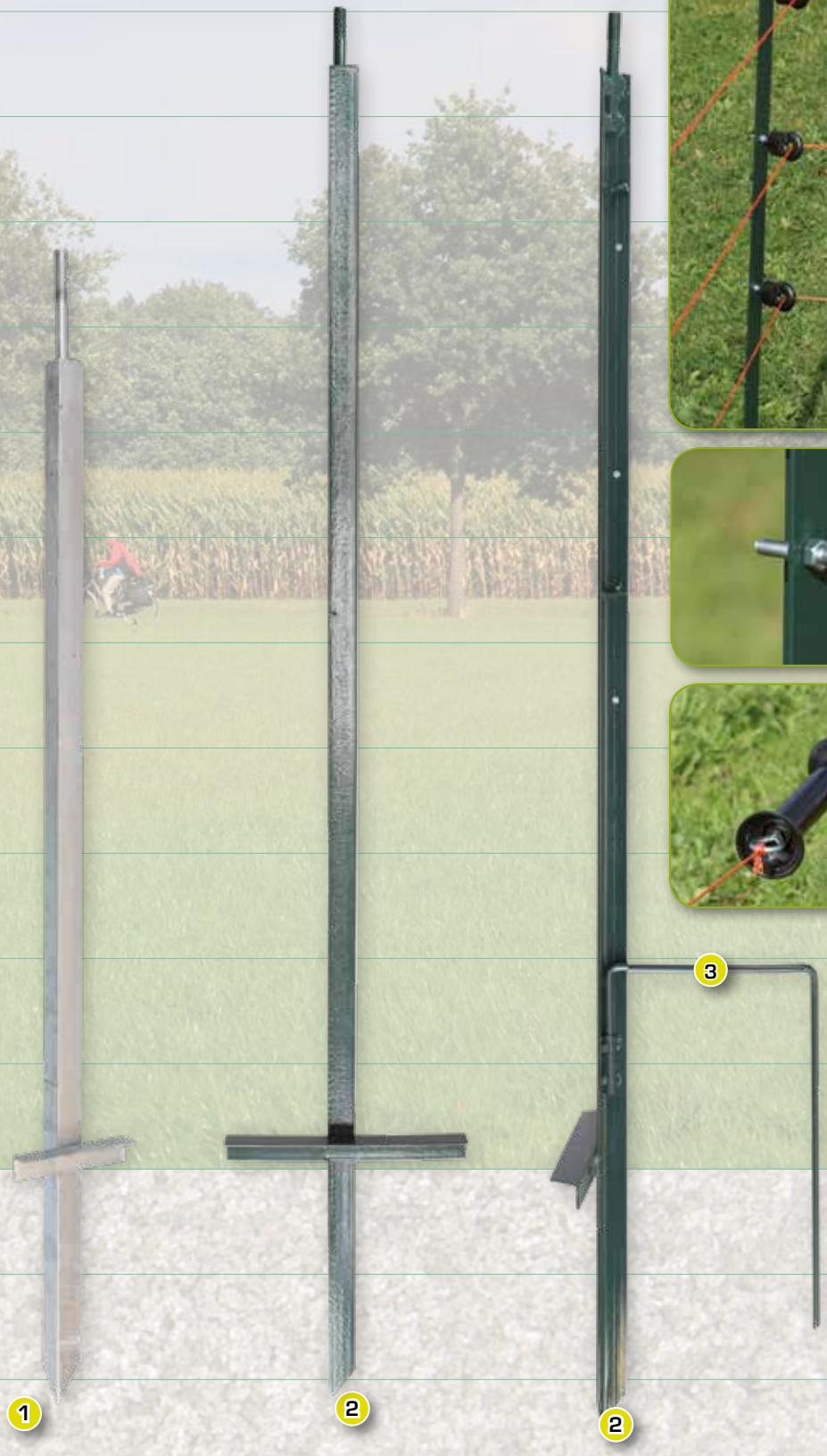






STRIP GRAZING POSTS

1 - 2. FIBREGLASS FENCE POST
Suitable for temporary or semi-permanent fences. Super quality, long lasting post. The post has a solid adjustable foot support and is completed with a top cap. The post is delivered with 2 or 3 click-on insulators (code 162-80210-25) which are suitable for wire and tape up to 20 m.
For 40 mm tape insulator 162-80066-10 is available, for rope insulator 162-80065-10.

3. "LIFE"POST
Post with an insulator at 40 cm and a "life" pigtail up to 85 cm.

4. GREEN PIGTAIL POST
Very solid, 8 mm thick green pigtail post. Perfect for temporary fences, with an environmental friendly colour. For the tensioning of more wires you can add insulator 162-80062-25.
Length 105 cm, max. fencing height 89 cm.

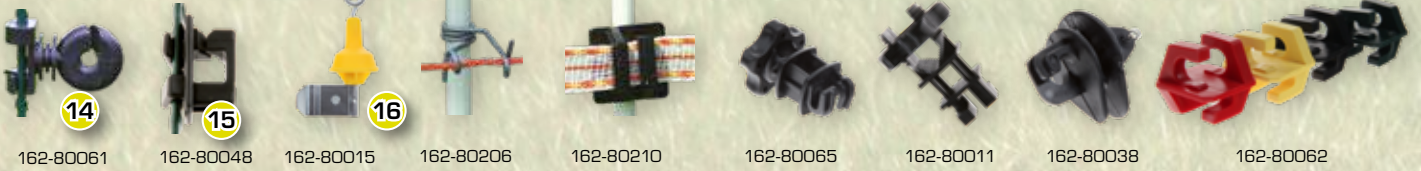
5. WHITE PIGTAIL POST
6 mm thick white spring steel pigtail post. Perfect for temporary fences. For the tensioning of more wires you can add insulator 162-80063-25. Length 105 cm, max. fencing height 89 cm.

6. SPRING STEEL FENCE POST WITH PIGTAIL INSULATOR
Green, oval steel fence post with top insulator and solid foot support.For the tensioning of more wires you can add insulator 162-80061-25. Length 105 cm,
max. fencing height 85 cm.

7. SPRING STEEL FENCE POST WITH RING INSULATOR
Green, oval steel fence post with ring insulator and solid foot support. For the tensioning of more wires or tape you can add insulator 162-80061-25 or 162-80048-25. Length 105 cm,
max. fencing height 85 cm.

8 - 10. SPRING STEEL FENCE POST WITH ROPE INSULATOR
Green, oval steel fence post with rope insulator and solid foot support. For the tensioning of more wires or tape you can add insulator 162-80061-25 or 162-80048-25. Length 105 cm and 140 cm. Max. fencing height 85, 100 and 120 cm.

All information about the isulators for these posts you can find on page 63



162-80061 | 162-80048 | 162-80015 | 162-80206 | 162-80210 | 162-80065 | 162-80011 | 162-80038 | 162-80062

Photo	Art.nr.	Description	PU	
1	162-80205	Post, fibreglass, 105 cm 10 mm, incl. 2 click insulators	1	
		Posts, fibreglass 105 cm 10 mm, incl. 2 click insulators, per 50 price/piece	1	
2	162-80211	Post, fibreglass, 160 cm 10 mm, incl. 3 click insulators	1	
		Post, fibreglass, 160 cm 10 mm, incl. 3 click insulators, per 50 price/piece	1	
3	162-80114	"Live" Pigtail post 105 cm, second half conducts	1	
4	162-80106	Pigtail post, green 105 cm ø 8 mm, powder coated	1	
		Pigtail posts, green 105 cm ø 8 mm, powder coated per 30 price/piece	1	
5	162-80165	Pigtail post, spring steel, white 105 cm 6 mm, heavy galvanized	1	
		Pigtail posts, spring steel, white 105 cm 6 mm, per 30 price/ per piece	1	
6	162-80102	Posts, spring steel, green, oval with pigtail insulator 105 cm	1	
		Post, spring steel, green, oval with pigtail insulator 105 cm, per 25 price/piece	1	
7	162-80101	Posts, spring steel, green, oval with ring insulator 105 cm	1	
		Post, spring steel, green, oval with ring insulator 105 cm,, per 25 price/piece	1	
8	162-80125	Post, spring steel, 105 cm green, oval with rope insulator	1	
		Posts, spring steel, 105 cm green, oval with rope insulator, per 25 price/piece	1	
9	162-80159	Post, spring steel, 140/100 cm green, oval with rope insulator	1	
		Posts, spring steel, 140/100 cm green, oval with rope insulator, per 25 price/piece	1	
10	162-80157	Post, spring steel, 140 cm green, oval with rope insulator	1	
		Posts, spring steel, 140 cm green, oval with rope insulator, per 25 price/piece	1	
11	162-80117-25	Pigtail insulators, red for oval post, spare	1	
12	162-80116	Ring insulator for oval post, spare	1	
13	162-80118	Rope insulator for oval post, spare	1	

PU=Package Unit Price incl. VAT

130 cm
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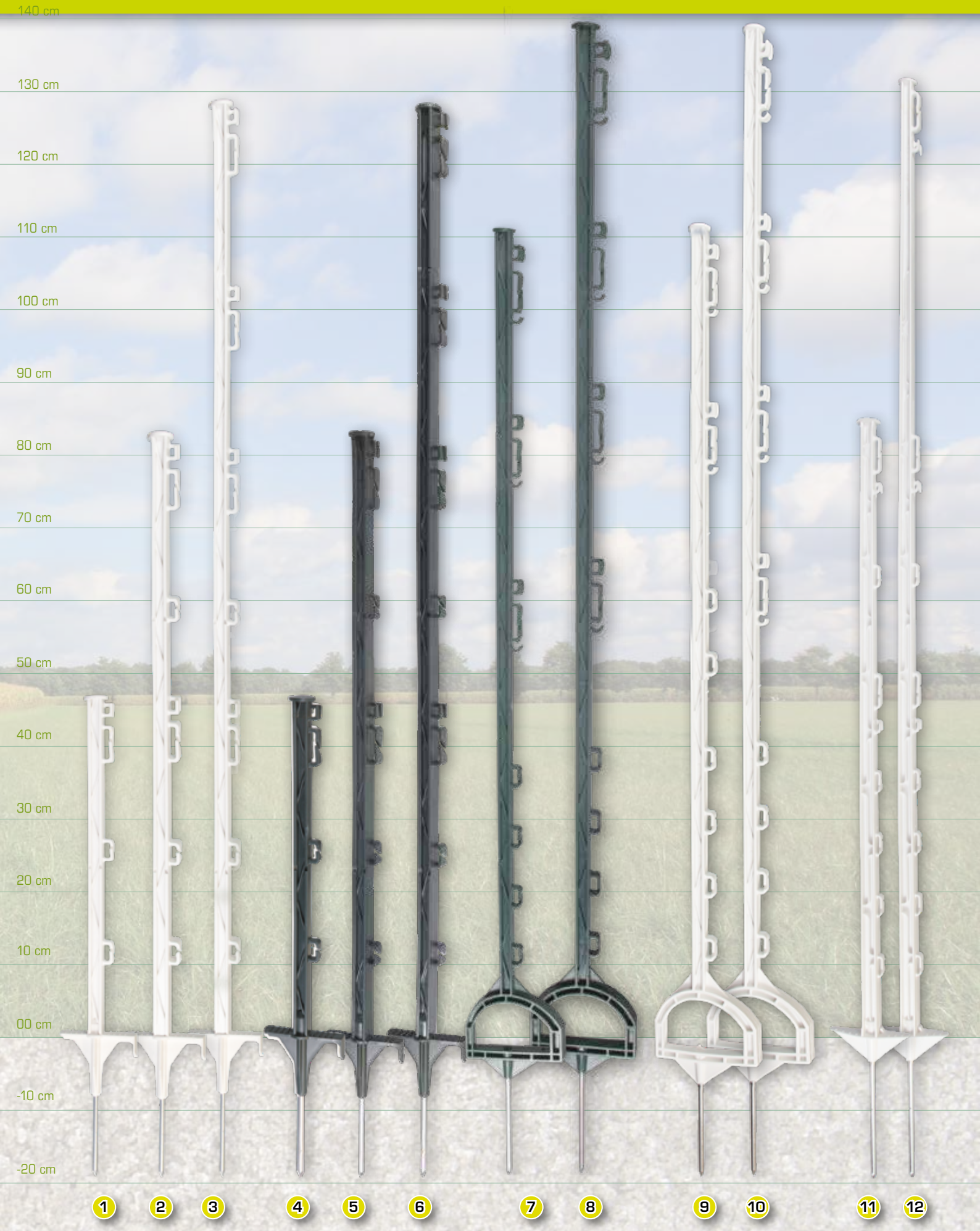
KOLTEC TIP

Use in combination with plastic posts for temporary fences rope or 20 mm tape. Wider tape catches to much wind and that will blow the posts down.

Photo	Art.nr.	Description	PU	
1	162-80318	Posts, synthetic, white, 70 cm incl. spike	1	
		Posts, synthetic, white, 70 cm incl. spike per 30 price/piece	1	
2	162-80321	Post, synthetic, white, 105 cm incl. spike	1	
		Post, synthetic, white, 105 cm incl. spike, per 20 price/piece	1	
3	162-80323	Post, synthetic, white, 160 cm incl. spike	1	
		Post, synthetic, white, 160 cm incl. spike, per 20 price/piece	1	
4	162-80317	Posts, synthetic, green, 70 cm incl. spike	1	
		Posts, synthetic, green, 70 cm incl. spike per 30 price/piece	1	
5	162-80316	Posts, synthetic, green, 105 cm incl. spike	1	
		Posts, synthetic, green, 105 cm incl. spike per 20 price/piece	1	
6	162-80324	Post, synthetic, green, 160 cm incl. spike	1	
		Post, synthetic, green, 160 cm incl. spike, per 20 price/piece	1	
7	162-80329	Posts, stirrup, synthetic, green, 130 cm	1	
		Posts, stirrup, synthetic, green, 130 cm per 20 price/piece	1	
8	162-80322	Posts, stirrup, synthetic, green, 160 cm	1	
		Posts, stirrup, synthetic, green, 160 cm per 20 price/piece	1	
9	162-80328	Posts, stirrup, synthetic, white, 130 cm	1	
		Posts, stirrup, synthetic, white, 130 cm per 20 price/piece	1	
10	162-80326	Posts, stirrup, synthetic, white, 160 cm	1	
		Posts, stirrup, synthetic, white, 160 cm per 20 price/piece	1	
11	162-80325	Posts, synthetic, white 105 cm, budget only per 10 price/piece	1	
12	162-80327	Posts, synthetic, white 154 cm, budget only per 20 price/piece	1	

PU=Package Unit Price incl. VAT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For mounting advise see page 37

1. KOLTEC SCREW AID
Easy accessory for the drill to screw in KOLTEC insulators in a quick and efficient way. Iron, galvanized

2. LISOFIX SCREW AID
Screw aid for use with the drill to screw in insulators in the posts. The screw aid is large enough to turn the insulator by hand into the wanted position.
A mark is added on the screw aid for the right position of the insulator

3. KOLTEC LISOFIX
Easy accessory for the drill to screw in ring insulators in a quick and efficient way

4. WIRE TWISTER
Handy tool to twist a wire around a wire for a good connection.

5. SECTION SWITCH
Ideal switch to connect or disconnect sections with 2 power exits.

6. MULTIPURPOSE FENCING TOOL
Indispensable tool for cutting the wire, removing clamps or using it as a hammer.

7. LIGHTNING DIVERTER
Electric fencers are sensitive for lightning. With the proper prevention measures it is possible to prevent damage on the electric fencer when struck by lightning. The KOLTEC lightning diverter offers the necessary protection by diverting the lightning charge directly to the ground.

8. ELECTRIC FENCE WARNING SIGN
Obligatory with an electric fence at a public road.
The sign has to be placed every 50 m.

9. SIGN " VERBODEN TOEGANG"
Only for the Dutch market.

10. KOLTEC SCREW AID
Screw aid KOLTEC, metal aid for KOLTEC hook-ring insulators.

Photo	Art.nr.	Description	PU	
1	162-85480	Screw aid KOLTEC, metal, for KOLTEC tape and ring insulators	1	
2	162-85462	Screw aid Lisofix, for different insulators	1	
3	162-85461	Screw aid KOLTEC Lisofix, for ring insulators	1	
4	162-85471-4	Wire twisters for solid connection	4	
5	162-85470	Switch, high voltage, for connecting sections, two exit terminals	1	
6	162-85458	Fencing tool, multifunctional	1	
7	162-80175-1	Lightning diverter	1	
8	162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	4	
9	162-39505	Sign "Verboden toegang", only for the Netherlands	1	
10	162-85472	Screw aid KOLTEC, metal aid for KOLTEC hook-ring insulators	1	

PU=Package Unit Price incl. VAT

1. KOLTEC DETECTOR
The KOLTEC detector measures the voltage and the current with one push on the button by pressing the metal brace on the wire (wire under the brace). The big advantage of the KOLTEC detector is that also the current direction is been read out. In a fence the current always runs from the source (electric fencer) tot the short-circuit in the fence, taking the shortest possible way.

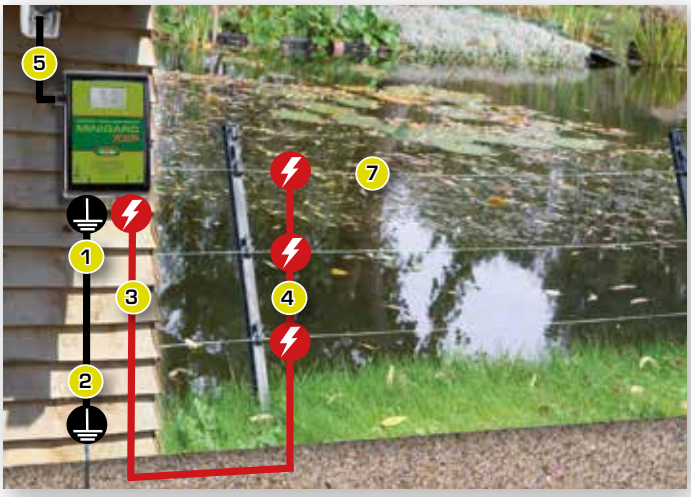
Voltage
The voltage can be read out by the KOLTEC detector, even so there is only one metal strip with which the fence is touched. The KOLTEC detector has a high impedance amplifier that makes it possible to take the hand of the user as reference capacity without feeling anything.

Current
During the measurement it is possible that the left or right direction light will flash. These lights are developed to indicate the direction of the current and with that de direction of the failure.
The KOLTEC detector calculates the resistance out the measured data and based on that a LED will be activated. If the tension is high, for example 7.0 kV and the current is 4 Ampere, than the tension is 1750 Ohm and the detector will not notice this as a failure and a direction light will not flash. If the tension is low, for example 2.5 kV and the current is 4 Ampère, than the resistance is 625 Ohm and the KOLTEC detector will activate a red direction light.

Photo	Art.nr.	Description	PU	
1	162-85457	Detector KOLTEC, without reference wire	1	
2	162-85451	Voltmeter, digital, black, measuring range up to 9.900 Volt	1	
3	162-85449	Tester, indication tension measuring, without reference wire. Excl. batteries	1	
4	162-85455	Tester 8-0-lite, testing indication in 8-levels	1	
5	162-85460	Tester for electric fences, wireless	1	
6	162-85450-1	Tester, neon, tension indication	1	

PU=Package Unit Price incl. VAT

1. **Connect the earth output (1) to an earth stake (2) with a high-tension cable.**
2. **Connect the current output (3) to the wire with a high tension cable. Mount this close to a post for preventing sagging down. As an option you can mount a section switch, or an on/off switch in between.**
3. **You can safely connect the cable (4) with the other wires (7) with for instance screw terminals or connection kits.**
4. **Connect the fencer to mains (5).**



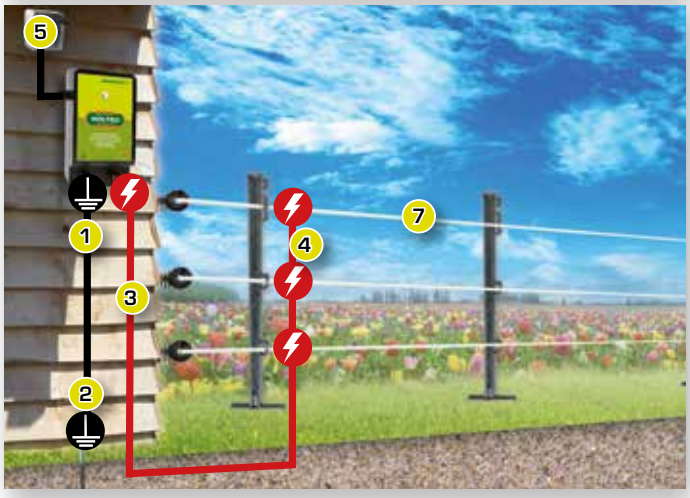
BATTERY, WET-CELL BATTERY AND SOLAR-ENERGY

If you have no electric power available you can decide to buy a wet-cell battery or battery fencer.
In most cases they can also be nourished with solar-energy.

EARTHING

A wooden fence or wall insulates the electric fence wire from the earth. With the consequence that the animal does not feel the shock. This is easily solved by mounting a wire on the wooden fence or wall that is connected to the earth output of the fencer.

The same occurs around a pond, where there is used gravel or natural stone. Here the conducting problem can be solved by tensioning an extra wire between the two electric wires on the posts which can function as an earth return wire.

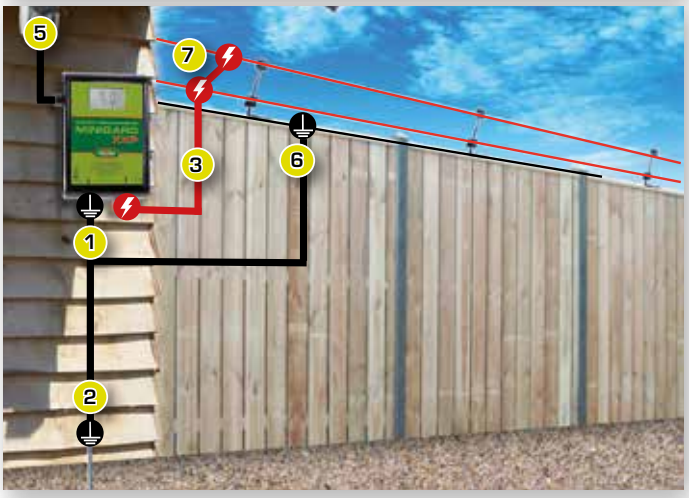


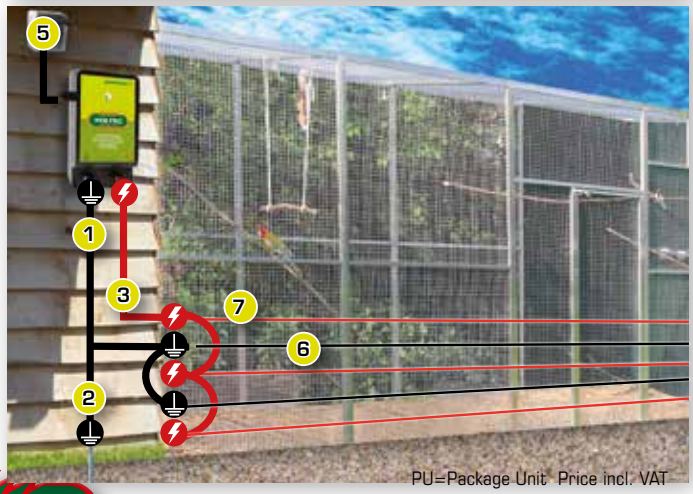
WOODEN FENCE

A wooden fence or wall insulates the electric fence wire from the earth. With the consequence that the animal does not feel the shock. This is easily solved by mounting a wire (6) on the wooden fence or wall that is connected to the earth output of the fencer.
You can use the same wire as the electric wires.
This wire does not need to be mounted insulated.
An earth stake can be used as support.

AVIARY

An aviary has to be often protected against cats and birds of prey on the front, but also up above.
You can protect the front and above with a gridding of at least 3 electric wires.
When the gaze is galvanized, the earth wire can be connected to the gaze (6). The gaze functions this way as an artificial earth. The aviary birds are not bothered by that.
If the gaze is plasticized, than there has to be mounted between the electric wires an earth wire (6). The plastic layer on the gaze isolates and can therefore not serve as zero or earth reference.





PU=Package Unit Price incl. VAT

Compose your own electric fence
www.koltec-electricfencing.com/configurator

1. MINIGARD XXP

The MiniGard XXP is a very powerful energiser that tolerates some growth of weeds and/or grass, without a drastic decrease of the tension on the fence. This energiser is highly recommendable around ponds with lots of plants on the banks or gardens with lots of plants on the fence.
Where plants touch the wire, they will die. Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful energiser can't get through.

2. MINIGARD XP

The MiniGard XP is 5x more powerful than the MiniGard II. It tolerates a little growth of weeds and/or grass. The energiser will hold the tension at light growth on a proper level. Where plants touches the wire, they will be scorched.

3. MINIGARD II HOBBY

A small energiser, very suitable for short distance fences. Does not tolerate growth of weeds and/or grass. The MiniGard can be installed in combination with various accessories to make a fence to size.

Photo	Art.nr.	Description	PU	
1	161-82529	Energiser KOLTEC MiniGard XXP mains	1	
2	161-82524	Energiser KOLTEC MiniGard XP mains, ideal for large gardens	1	
3	161-82520	Energiser KOLTEC MiniGard II Hobby mains, for wooden fences and aviaries	1	

PU=Package Unit Price incl. VAT

2
230VOLT

1. MINIGARD XXP POND KIT

This kit is designed especially to fence ponds. The MiniGard XXP is an energiser that tolerates some growth of pond plants, without loosing the tension on the fence.
This kit contains a MiniGard XXP, a connection cable set, 100 meter special turbo wire and two plastic wire strainers. Apart from this kit you need garden posts, with, depending on which kind of post, matching insulators. When the MiniGard XXP is installed at a longer distance from the pond, we recommend the use of high voltage cable for the connection. With a digital display which gives you information about the fence.

Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful fencer can't get through.

2. MINIGARD XXP

The MiniGard XXP is a very powerful energiser that tolerates some growth of weeds and/or grass, without a drastic decrease of the tension on the fence. This energiser is highly recommendable around ponds with lots of plants on the banks or gardens with lots of plants on the fence.
Where plants touch the wire, they will die. Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful energiser can't get through.

5. POND EDGE CLAMP

Nice and practical clamp for a natural stone or wooden pond edge. You can screw in the insulators very easy. Suitable for edges up to 40 mm thick.

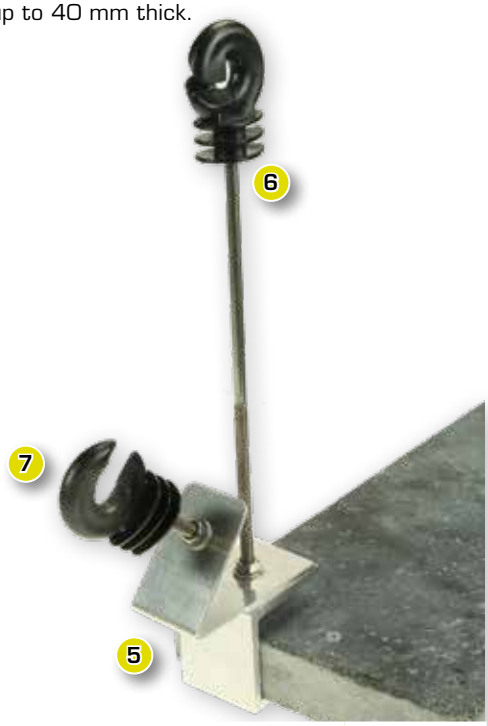


Photo	Art.nr.	Description	PU	
1	161-82528	Energiser KOLTEC MiniGard XXP mains, pond kit	1	
2	161-82529	Energiser KOLTEC MiniGard XXP mains	1	
3	162-39023	Wire, green 100 mtr, 13 PE + 3*0,2 INOX + 1*0,25 Cu	100	
4	162-80150-2	Strainers, synthetic, green, for wire and tape up to 20 mm	1	
5	162-80164-4	Pond edge clamps + insulators per 4 pieces	4	
6	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
7	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	

1. MINIGARD II AVIARY KIT
In this kit we added to the MiniGard II 25 little ring insulators, a plastic wire strainer, 100 meter wire and a connecting cable kit.

2. MINIGARD II HOBBY
A small energiser, very suitable for short distance fences. Does not tolerate growth of weeds and/or grass. The MiniGard can be installed in combination with various accessories to make a fence to size.

Photo	Art.nr.	Description	PU	
1	161-82526	Energiser KOLTEC MiniGard II aviary kit mains, for wooden cages	1	
	161-82523	Energiser KOLTEC MiniGard II aviary kit mains, for metal cages	1	
2	161-82520	Energiser KOLTEC MiniGard II Hobby mains, for wooden fences and aviaries	1	
3	162-39010	Wire, black, 100 mtr ca 2 mm, 12 PE wires + 3*0,2 INOX	100	
4	162-80150-2	Strainers, synthetic, green, for wire and tape up to 20 mm	2	
5	162-80088-25	Ring insulators, small for wooden constructions	25	
	162-80099-25	Ring insulators, small with M5 thread, for metal constructions	25	

1. MINIGARD XP GARDEN KIT

In this kit there is a more powerful version of the energiser. This fence energiser is suitable for longer fences and is less sensitive for eventual light growth of weeds or plants. Besides the fencer we will deliver a basic kit with which a fence can be build. All you need to buy further are garden posts or insulator supports for the fence and an earthpin.
The kit contains a MiniGard XP, 2 wire strainers, connecting cable set and 250 meter wire.

2. MINIGARD XP

The MiniGard XP is 5x more powerful than the MiniGard II. It tolerates a little growth of weeds and/or grass. The energiser will hold the tension at light growth on a proper level. Where plants touches the wire, they will be scorched.

Photo	Art.nr.	Description	PU	
1	161-82527	Energiser KOLTEC MiniGard XP mains, garden kit	1	
2	161-82524	Energiser KOLTEC MiniGard XP mains, ideal for large gardens	1	
3	162-39015	Wire, black, 250 mtr ca 2 mm, 12 PE wires + 3*0,2 INOX	250	
4	162-80150-2	Strainers, synthetic, green, for wire and tape up to 20 mm	2	
5	162-80103-10	Garden posts, green, 100 cm 7 mm, incl. 2 click insulators, per 10	10	
	162-80310-10	Garden posts, fibreglass, black, 50 cm	10	
6	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	
	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	

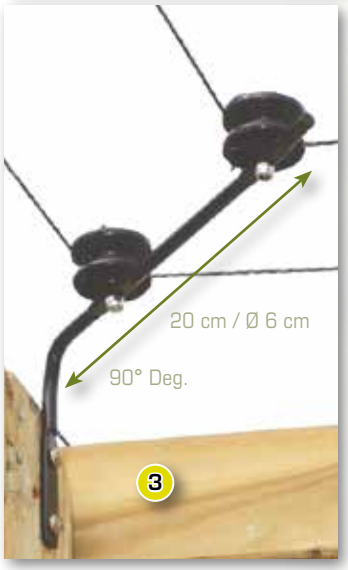
1. GREEN POLY POST
Dark green post, with built-in insulators for all kind of wires.

3. FIBREGLASS GARDEN POSTS
A solid, discrete fibreglass post with a special synthetic foot for a stable mounting. The foot also takes care of less growth of weed around the post. Simplifying the maintenance of the garden. The black color takes care of a discrete placing of the fence. Is supplied with 1 click-on insulator (162-80063-25).

3. GREEN PIGTAIL POST
Dark green pigtail post, 8 mm thick. Extra insulators are available, art.nr. 162-80062-25.

4. GREEN GARDEN POST
7 mm thick green garden post. Ideal for a hardly visible placing of a fence. Delivered with two green click-on insulators.
Art.nr. 162-80064-25

Photo	Art.nr.	Description	PU	
1	162-80317	Post, synthetic, green, 70 cm incl. spike	1	
2	162-80310-10	Garden posts, fibreglass, black, 50 cm	1	
3	162-80106	Pigtail post, green 105 cm ø 8 mm, powder coated	10	
4	162-80103-10	Garden posts, green, 100 cm 7 mm, incl. 2 click insulators, per 10	10	
5	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
6	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
7	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	



1 - 2. INSULATOR BRACKET
Practical bracket designed for mounting on walls and wooden fences. Standard delivered with two insulators. Single insulators, art.nr. 162-80063-25, are per bag of 25 pcs available.
4 brackets per pack.

3. INSULATOR BRACKET FOR VARIES
Ideal for leading a wire in varies on a wall or fence, keeping the wires in line with the fence itself. Packed per 2 pcs.

4. INSULATOR BRACKET FOR CORNERS
For leading a wire on a fence through the corners of a garden, this is an ideal bracket. Packed per 2 pcs.

KOLTEC TIP

A wooden fence or wall insulates the electric fence wire from the earth. If a cat or other animal climbs against the fence, it won't feel anything. This problem can be solved very easily, by mounting an earth wire on top of the wooden fence or wall that is connected with the earth pole of the fencer. The same problem can occur in a fence around a pond, where the edge of the pond is surfaced with e.g. marble stone. Also in this case you can solve the problem by using an earth return wire between the two "hot" wires on the posts.

Photo	Art.nr.	Description	PU	
1	162-80110-4	Insulator brackets for wooden fences	4	
2	162-80163-4	Insulator bracket, right-angle incl. 2 insulators, per 4	4	
3	162-80111-2	Insulator brackets for corner support for edges	2	
4	162-80112-2	Insulator brackets, support for varies	2	
5	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	

1. BRAIDED POLY WIRE
Thin, green poly wire for a camouflaging mounting on a fence round a pond or border.

2. POLY WIRE
Sturdy black wire with a very good conductivity. Suitable for long fences and mechanical heavy circumstances.

200 mtr 162-39127
500 mtr 162-39126
1.000 mtr 162-39124

3. POLY WIRE
Thin, wire, an effective conductor for fences, walls and around ponds.

Orange 100mtr 162-39000
Orange 250mtr 162-39020
Black 100mtr 162-39010
Black 250mtr 162-39015

Photo	Art.nr.	Description	PU	
1	162-39023	Wire, green 3*0,2niro + 3*0,25Cu 100 mtr	100	
2	162-39126	Wire poly, black, 200 mtr ±3,5 mm, 30 PE wires + 6*0,3 INOX + 3*0,25cu	500	
	162-39127	Wire poly, black, 500 mtr ±3,5 mm, 30 PE wires + 6*0,3 INOX + 3*0,25cu	200	
	162-39124	Wire poly, black, 1.000 mtr ±3,5 mm, 30 PE wires + 6*0,3 INOX + 3*0,25cu	1000	
3	162-39010	Wire, black, 100 mtr ca 2 mm, 12 PE wires + 3*0,2 INOX	100	
	162-39015	Wire, black, 250 mtr ca 2 mm, 12 PE wires + 3*0,2 INOX	250	
	162-39000	Wire, orange, 100 mtr ca 2 mm, 12 PE wires + 3*0,2 INOX	100	
	162-39020	Wire, orange, 250 mtr ca 2 mm, 12 PE wires + 3*0,2 INOX	250	

art-number-amount /PU

PU=Package Unit Price incl. VAT

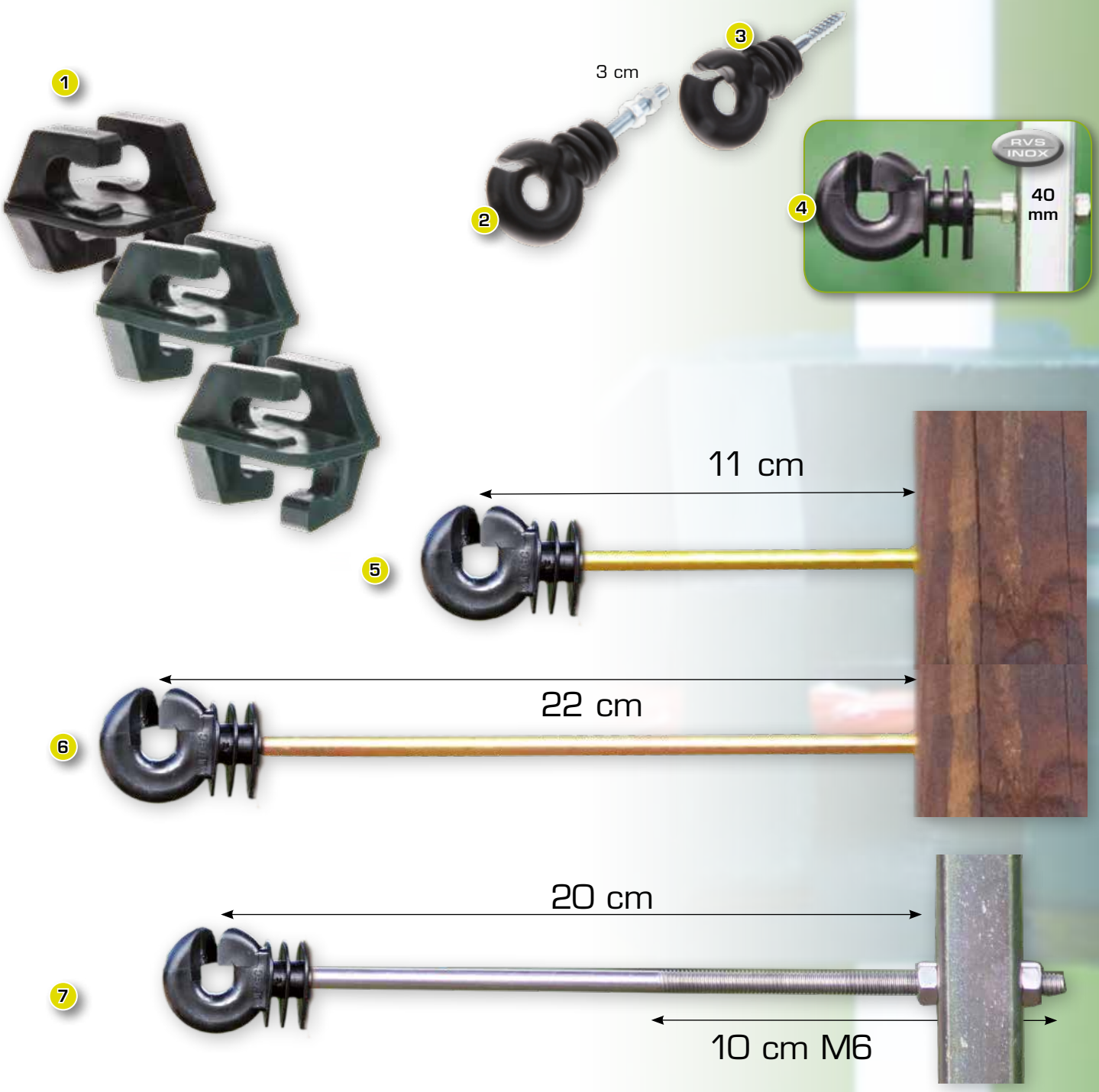


Photo	Art.nr.	Description	PU	
1	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	
2	162-80099-25	Ring insulators, small with M5 thread, for metal constructions	25	
3	162-80088-25	Ring insulators, small for wooden constructions	25	
4	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	
5	162-80505-20	Ring insulators special, half long 10 cm, for wooden posts	20	
6	162-80503-10	Offset ring insulators, 22 cm for wire/rope on wooden posts	10	
7	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
8	162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	4	

art-number-amount /PU

PU=Package Unit Price incl. VAT

1. SCREW TERMINAL
Black, handy to mount/connect HT-cable with poly wire.

2-4. WIRE CONNECTORS
Double zinc plated & INOX
Single zinc plated & INOX

5. GROUND CABLE
High-voltage cable with stainless steel braid.
Connection cable which can be placed underground and is protected against mechanical influences by its stainless steel braid. The braid can also be used as an earth lead/rod.

6. HIGH VOLTAGE CABLE
HT-cable with a solid core of 1.6mm.
Insulation up to 2.000 V.

7. HIGH VOLTAGE CABLE (PER 10 MTR)
To connect a fencer to the fence, we recommend the use of high voltage cable. This cable has an insulation value of 12.000 Volt and therefore very suitable to lead this cable through a wall, connecting the fencer.

8. TENSIONER
Re-inforced, plastic version. Available in white, black and green.

9. WIRE STRAINER
Simple strainer for thin poly wire.

10. LONG EARTH STAKE
When you want to have the maximum use of your electric fencer, then earthing is of crucial importance. Without earthing the system can never work properly. The earthing has to be as such that a very low resistance is present.

11. LIGTHNING ARRESTOR
Fence energisers are sensitive for lightning. With the proper prevention measures, the chance of possible damage to the energisers can be reduced.

The KOLTEC lightning diverter offers the necessary protection by diverting the over tension in the air to the ground. With this the chance on a lightning stroke and therefore damage on your energiser will be reduced.

See page 37 for more information and installation instructions.

12. SWITCH
Ideal for connecting two circuits with eachother. It has two outlets for connecting two different circuits.

See page 37 for more information and installation instructions.

Photo	Art.nr.	Description	PU	
1	162-36127	Screw terminal, 1 - 6 mm2	1	
2	162-39099-4	Connectors for wire up to 4 mm, INOX, with wing nuts	4	
3	162-39093-4	Connectors, single for wire up to 4 mm, INOX, with wing nuts and connection tab	4	
4	162-39034-4	Wire connectors for thin wire	4	
5	162-36124-10	Ground cable, HT-cable with INOX braid, 10 mtr	10	
6	162-36126-25	High-voltage cable with solid zinc plated 1,6 mm core, 25 mtr	25	
7	133-36122-10	High tension cable, coil with 10 mtr, flexible 7 strand inox core	10	
8	162-80150-2wt	Strainer reinforced, synthetic, white, for wire, package of 2	2	
	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
	162-80150-2	Strainers, synthetic, green, for wire and tape up to 20 mm	2	
9	162-80176-2	Wire strainer for thin synthetic wire	2	
10	162-80198	Earth stake, short, 45 cm with connector	1	
11	162-80175-1	Lightning diverter	1	
12	162-85470	Switch, high voltage, for connecting sections, two exit terminals	1	

Photo	Art.nr.	Description	PU	
1	162-80019	Gate handle KOLTEC, black, INOX	1	
2	162-79082-4	Gate handle anchors KOLTEC, 3-way, INOX	4	
3	162-79084-4	Gate handle anchors KOLTEC, 3-way, INOX, for metal posts M6	4	
4	162-79080-4	Gate handle anchors KOLTEC, 2-way, INOX	4	
5	162-39031	Small reel, handy for strip grazing	1	
6	136-80127	Reel hook for fences	4	
7	162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	1	
8	162-39505	Sign "Verboden toegang", only for the Netherlands	1	
9	162-85450-1	Tester, neon, tension indication	1	
10	162-85455	Tester 8-0-lite, testing indication in 8-levels	1	
11	162-85460	Tester for electric fences, wireless	1	
12	162-85449	Tester, indication tension measuring, without reference wire. Excl. batteries	1	

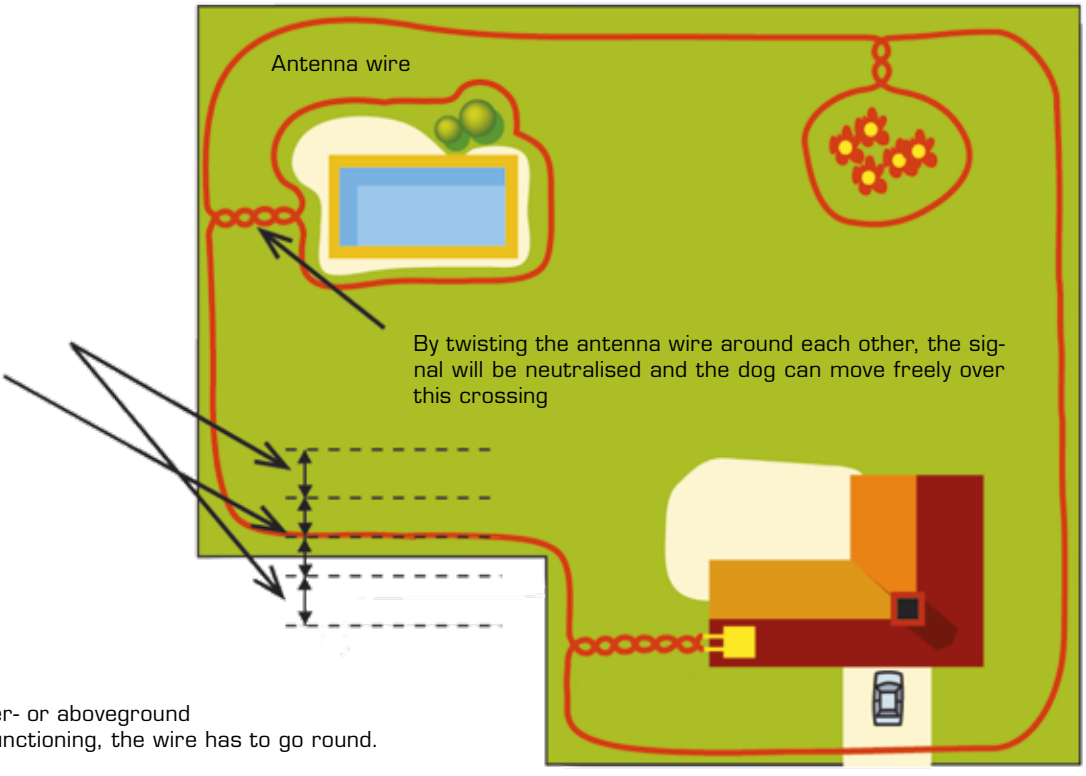
1. CANIFUGUE MIX SET

This set operates the same way as Canifugue Complete Set, but is equipped with a modern transmitter with a LED display. Via this display the transmitter is simply adjusted. The transmitter functions on mains and the receiver in the collar on batteries (9). At normal use the battery lasts about 6 months. This unit is suitable for lengths up to approx. 1.500 mtr with a thicker wire. Detects also a wire cut. The amount of collars is unlimited.

2. CANIFUGUE COMPLETE SET & SMALL

Basic set for the installation of an invisible fence. The antenna wire can be buried, but also be mounted just above the ground. Volume and impulse power are adjustable on various degrees.
The transmitter functions on mains and the receiver on batteries (9). At normal use the battery last about 6 months. The amount of collars is unlimited.

CONNECTION DIAGRAM



The wire can be installed under- or aboveground
In order to have the system functioning, the wire has to go round.

SPARE PARTS

3. WIRE 100M
4. COLLAR
5. MARKER FLAGS (10)
6. BATTERIES
7. WIRE CONNECTORS (3 PCS)
8. ADAPTER 7.5 VOLT DC

Photo	Art.nr.	Description	PU	
1	165-50011	Canifugue Mix	1	
2	165-50010	Canifugue Complete	1	
	165-50003	Canifugue Small for cats and small dogs	1	
3	165-50015	Antenne wire, 100 mtr	1	
4	165-50016	Collar, seperate for Canifugue Small	1	
	165-50018	Collar, seperate for Canifugue Complete and Mix	1	
5	165-50017	Set of 10 flags	1	
6	163-45543	Blister with 1* 3 Volt CR2 lithiumion battery	1	
	163-45544	Blister with 2* 3 Volt CR2 lithiumion batteries	2	
7	165-50005	3 connectors for antenne wire	3	
8	135-39989	Adapter 7,5 Volt DC for Canifugue	1	

PU=Package Unit Price incl. VAT

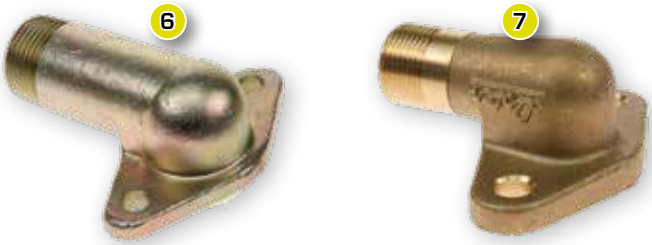


Photo	Art.nr.	Description	PU	
1	165-50045	Pasture pump E2, yellow	1	
2	165-50046	Pasture pump L4, blue	1	
3	165-50047	Pasture pump L3, green	1	
4	165-50077	Membrane Pasture pump E2	1	
5	165-50089	Membrane for L3 & L4	1	
6	165-50078	Strainer narrow E2	1	
7	165-50090	Connection piece/flange for L3/L4	1	
8	165-50083	Set filling tubes 9 pieces	1	
9	165-50082	Maintenance kit E2	1	
10	165-50085	Pump hose 25 mtr	1	
	165-50086	Pump hose 50 mtr	1	
11	165-50084	Hose kit Pasture pump E2	1	
12	165-50087	Sucking basket Pasture pump E2	1	

PU=Package Unit Price incl. VAT

Photo	Art.nr.	Description	PU	
1	165-50028	Drinking bowl, iron, enamelled with tongue	1	
2	165-50029	Drinking bowl, iron, enamelled with spindle	1	
3	165-50031	Drinking bowl, with tongue, black	1	
4	165-50030	Protection bracket for drinking bowls	1	
5	165-50040	Protection bracket for drinking bowls	1	
9	165-50026	Saltstone holder, black	1	
10	165-50027	Saltstone holder, red	1	

PU=Package Unit Price incl. VAT

KOLTEC is presented more and more in shops and fairs.
On the shelves with Koltec products you'll find most components which are needed for building an electric fence. On fairs and markets KOLTEC can be represented by the wagon as shown below. By which the use of the materials is demonstrated in a practical way.

Design your electric fence: Scan and print this page for multiple use.

MEADOW PERIMETER	POSTS: WOOD/METAL/CONCRETE	DISTANCE BETWEEN POSTS	ANIMAL SPECIES	NUMBER OF WIRE/TAPE/ROPE ONE ABOVE THE OTHER	DISTANCE BETWEEN ENERGISER & FENCE	NUMBER OF GATES

	ORDER				
	Art.Nr.	Discription	#	Price	Sub-total
WIRE / TAPE / ROPE					
INSULATORS BETWEEN					
CORNER INSULATORS					
ENERGISERS					
EARTHNING / LIGHTNING					
CONNECTION					
GATE MATERIAL					
POLES					
MISCELLANEOUS					
				Total	

Scan this QR-code with your smartphone and go directly to our website **www.koltec.eu**.

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